June 9, 2003

A. Yvonne Pierce
Group Manager of Environmental and Hazardous Material Services
The Boeing Company
P.O. Box 516 MC S221-1400
St. Louis, MO 63166-0516

Subject: Response to Installation Comments on Re-Opening for Cause
Operating Permit No. OP1999052 and OP2001031

On December 9, 2002, the Air Pollution Control Program (APCP) received a letter from the Environmental Protection Agency (EPA), Region VII requesting the APCP re-open the Title V permits for McDonnell Douglas Corporation, a wholly-owned subsidiary of the Boeing Company ("Boeing") in St. Charles and St. Louis for cause. The APCP agreed with EPA Region VII's assessment of the operating permits as issued, and reopened the permits on December 11, 2002 by inviting Boeing to submit any information that would be beneficial to incorporating the proposed revisions into the Title V Permit.

On February 20, 2003, the APCP received a letter from Boeing concerning issues raised in Re-opening for Cause of Operating Permits OP1999052 (St. Charles) and OP2001031 (St. Louis). The letter contained information Boeing felt would be beneficial to incorporate in the revised Part 70 (Title V) operating permit and issues to be considered when drafting the revised Boeing operating permits. On April 14, 2003, the DNR Air Pollution Control Program (APCP) received a letter from Boeing providing comments on the revised draft for operating permit OP1999052.

Enclosed is the APCP's response to the suggestions provided by Boeing in the February 20, 2003, letter and the comments/suggestions provided by Boeing in the April 14, 2003, letter. If you have any questions or additional comments, please contact me at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102. Thank you for your time and attention.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Pamela Muren, P.E.
Operating Permit Unit Chief

EC: Ms. Kathrina Donegan
St. Louis County Department of Health
Air Pollution Control Program
111 South Meramec Avenue
Clayton, MO 63105

Ms Harriet Jones
EPA Region VII
ARTD/APCO
901 N. 5th Street
Kansas City, KS 66101-2907

MEMORANDUM

DATE:

TO: A. Yvonne Pierce
Group Manager of Environmental and Hazardous Material Services
The Boeing Company
P.O. Box 516 MC S221-1400
St. Louis, MO 63166-0516

FROM: Pam Muren, Operating Permit Unit Chief

SUBJECT: Response to Public Comments

The APCP has received two sets of comments/suggestions from Yvonne Pierce of the McDonnell Douglas Corporation, a wholly-owned subsidiary of the Boeing Company ("Boeing") concerning the re-opening for cause of Operating Permit OP1999052 dated February 20, 2003, and April 14, 2003. The February 20, 2003, letter contains seven comments/suggestions and the April 14, 2003, letter contains 116 comments/suggestions. The comments/suggestions are addressed in the order of which they appear within the letters.

February 20, 2003, Comment Letter from Yvonne Pierce of Boeing

Comment #1:
St. Louis Item 1 and St. Charles Item 1

EPA Comment: With respect to the emission limitations for handwipe cleaning operations in the St. Charles permit (Conditions (B)(1) (page 19) and (C)(1) (page 20)) and the St. Louis Permit (Conditions EU0030-001, EU0030-002 and EU0050-001), EPA objects that the following provision is not authorized by the underlying regulation and "relaxes the definition of compliance":

(1) Housekeeping measures

* * *

(d) Activities not conforming to the above housekeeping measures are deemed in compliance if corrected within 24 hours, unless they are observed on three (3) successive inspections.

Boeing Response: Boeing understands EPA's concern that this provision could be construed to excuse instance-by-instance reporting of minor, isolated housekeeping issues. However, the provision should be understood as properly implementing, consistent with the Aerospace NESHAP, an enforceable and effective housekeeping program that incorporates a robust system of training, auditing, and corrective action to instill knowledge of and adherence to the desired work practices.

In that vein, Boeing, in cooperation with the permitting authorities, has voluntarily:

- instituted various training programs that promote adherence to the desired work practices,
- agreed to self-audit its cleaning operations to gauge the effectiveness of the overall housekeeping program; and
- adopted a documented corrective action process that ensures that isolated lapses are recorded and corrected in a fashion that reinforces future adherence to those work practices.

Moreover, given the adoption of the programmatic approach described above, Boeing has chosen to apply its housekeeping program to some non-aerospace cleaning operations, which has resulted in additional environmental benefits, and has refrained from claiming the exemption from the Aerospace NESHAP's requirements provided for the handling of hazardous wastes, which would have further limited the applicability of the desired work practices.[1] In addition, Boeing has acquiesced to conservative interpretations of some housekeeping requirements, such as the phrase "upon completion of use."[2]

In light of this programmatic approach to housekeeping and Boeing's willingness to broadly apply these measures to its operations, the provision to which EPA objects should merely be viewed as a measure by which the effectiveness of the Boeing program can be evaluated. Thus, failure to promptly correct issues or repetitive findings in the same area, as specified in the provision cited above, are indicative measures of non-compliance with the emission limitation, i.e., a failure to carry-out its program. EPA's action in forcing the reopening of Boeing's permits on the basis of this provision threatens this carefully and fairly structured approach.

As discussed previously at the January 21, 2003 meeting, a programmatic approach to housekeeping compliance finds support in § 63.749(c)("Compliance dates and determinations: Cleaning Operations") of the Aerospace NESHAP. That provision defines compliance with the housekeeping emissions limitations as follows:

> "Each cleaning operation subject to this subpart shall be considered in noncompliance if the owner or operator fails to institute and carry out the housekeeping measures required under 63.744(a)."

A reasonable reading of this provision, which is worded quite differently from the other provisions of § 63.749(c), is that a facility is in compliance with the housekeeping requirements specified in § 63.744(a) if it has instituted and is carrying out an effective program to ensure that the specified housekeeping measures are consistently adhered to by facility personnel. The term "institute" connotes a desire for a programmatic approach, rather than slavish focus on discrete and isolated cleaning events. Similarly, § 63.749(c) speaks to "carry[ing] out" the "housekeeping measures" in a general collective sense, suggesting again that the focus is on the presence of an effective program as a whole.[3] It bears noting that aerospace cleaning operations involve hundreds of employees and are conducted at scores of locations across the Boeing

facilities, ranging from small work benches with a single operator to large aircraft nearing completion on the flight line with multiple operators. Given the multitude of personnel and activities governed by this limitation, it is appropriate to design a programmatic compliance approach that focuses on overall compliance across the spectrum of affected operations and personnel.

This reading of the underlying requirement provides greater environmental benefit and ensures more effective compliance with the intent of the housekeeping provisions. Adherence to those provisions can only be accomplished through training and behavior modification. The effectiveness of such training and behavior modification can be measured by auditing the operations in question and instituting prompt corrective measures to reinforce the training and, through prompt correction, to accomplish the desired behavior modification. Consistent with that approach, Boeing has implemented various training programs to instill the required behavior in affected personnel, and although specific monitoring is not required by the Aerospace NESHAP, with the County and DNR's approval Boeing has implemented a both a periodic and a documented "for cause" audit process. These audits are complemented by a form that supervisors must sign acknowledging any housekeeping issue in their area and detailing any required corrective actions. We believe that these measures are consistent with the definition of compliance in § 63.749(c) in that they establish a verifiable housekeeping program, and that successive observation of instances of non-adherence to the housekeeping work practices is indicative of an ineffective housekeeping program.

In view of EPA's objection, however, Boeing proposes to clarify the above approach by inserting the following permit conditions:

Emission Limitations:

(1) Housekeeping measures .

(a) Permittee shall institute and carry out a housekeeping program that requires the following:

(i) Place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers upon completing their use. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton-tipped swabs used for very small cleaning operations are exempt from this requirement.

(ii) Store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers (including flip-top or squirt bottles with small openings).

(iii) Conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills.

(c) As part of the program required by (a) above, permittee shall conduct quarterly

audits of handwipe cleaning operations to determine whether the specified work practices are being followed. During each audit, Permittee shall document any observed instance where the specified work practices are not being followed and shall provide for prompt correction. Within one week, Permittee shall re-audit any area where a previous audit documented an observed instance where the specified work practices were not being followed.

(d) If, during the re-audit of a particular area, Permittee again documents observed instances where the specified work practices were not followed, Permittee shall be deemed to have not instituted and carried out a housekeeping program in accordance with this emission limitation.

Should DNR reject the programmatic approach advocated above, it would be inappropriate to continue many of the features of the programmatic approach that have been voluntarily implemented to date. For instance, the provision that periodic audits be performed should be deleted from the permit, as such audits are not specifically required by the underlying requirements.[4] Boeing would further request that the provision be modified to clarify that the language "upon completion of use" (with respect to the requirement to place solvent applications in closed container) means at the end of the shift rather than upon leaving the work area. As EPA itself notes, the underlying regulation does not use the words "before leaving their work area." Rather, this language was included as interpretive clarification, albeit conservative, from DOH and DNR, to which Boeing acquiesced in light of the other provisions that were included in the permit. However, applicators are generally not used continuously until their use is completed. They are used, then used again, and so on. Thus, the mere temporary cessation of use is not the same as the completion of use. Against this background it is impractical and unfair to expect an aerospace worker to predict the future of each applicator she uses each time she is not using it for even a moment. On the other hand, it is more practical and fair to expect the worker to get all applicators she has been using during her shift into closed containers at the end of the shift. Therefore, if DNR is unwilling to accept the programmatic approach, then Boeing would propose that the following language be added to the permits to resolve finally this interpretive issue:

(i) Place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers upon completing their use. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton-tipped swabs used for very small cleaning operations are exempt from this requirement. ***The use of a cloth, paper or other absorbent applicator used for cleaning will not be considered to be completed until the end of the shift during which such applicator was in use. The failure to place all applicators in use during a shift into closed containers at the end of the shift is a deviation of this emission limitation.***

Response to Comment #1: *The Air Pollution Control Program (APCP) understands and appreciates both Boeing and EPA's comments on the*

housekeeping measures in the St. Charles and St. Louis County permits identified above. The APCP applauds Boeing on the efforts to attempt to clarify requirements and develop programmatic approaches to demonstrate compliance with applicable requirements. However, after listening to both positions, the APCP agrees with EPA Region VII that the following provision is not authorized by 40 CFR Part 63, Subpart GG, relaxes the definition of compliance and therefore, cannot be incorporated in the Part 70 operating permit.

> *"Housekeeping measures*
> ***
> *(d)Activities not conforming to the above housekeeping measures are deemed in compliance if corrected within 24 hours, unless they are observed on three successive inspections."*

The specific activities defined above not conforming to the housekeeping measures would be deemed a deviation and possibly a violation of the permit condition. Stating a deviation is deemed compliance if corrected within 24 hours, unless deviations are observed on three successive inspections, appears to indicate the disappearance of a deviation if corrected within 24 hours. We applaud the approach to correct the deviation within a set period of time, however a deviation indicates potential non-compliance of a permit condition that should be evaluated by the APCP and/or EPA in a deviation report. Therefore, the APCP is removing (d) from the housekeeping measures defined above.

The APCP does not agree with Boeing's interpretation regarding 40 CFR Part 63, Subpart GG, §63.749(c). According to §63.749(c),

> *"Cleaning operations. Each cleaning operation subject to this subpart shall be considered in noncompliance if the owner or operator fails to institute and carry out the housekeeping measures required under §63.744(a). Incidental emissions resulting from the activation of pressure release vents and valves on enclosed cleaning systems are exempt from this paragraph."*

The regulation does not require Boeing to develop an effective program to carry out the housekeeping measures identified in §63.744(a). However, if that is Boeing's standard mode of operation regarding compliance with applicable requirements, the APCP applauds Boeing's efforts. The requirements of §63.749(c) do require Boeing to implement the following identified in §63.744(a):

> *"(a) Housekeeping measures. Each owner or operator of a new or existing cleaning operation subject to this subpart shall comply with the requirements in these paragraphs unless the cleaning solvent used is identified in Table 1 of this section or contains HAP and VOC below the de minimis levels specified in §63.741(f).*
> (1) *Place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers*

upon completing their use. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton-tipped swabs used for very small cleaning operations are exempt from this requirement.

(2) *Store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers.*

(3) *Conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills."*

The APCP would prefer Boeing not stop their programmatic approach based on a difference of interpretation. Given the adoption of the programmatic approach described above, Boeing has chosen to apply its housekeeping program to some non-aerospace cleaning operations, which has resulted in additional environmental benefits, and has refrained from claiming the exemption from the Aerospace MACT requirements provided for the handling of hazardous wastes. If Boeing chooses the hazardous waste exemption from the MACT, it might relax the record keeping a little, but the RCRA hazardous regulations require hazardous waste to be stored in closed containers – which is very similar to the "work practice" requirements. The housekeeping program not only benefits the environment, it also benefits Boeing by maximizing the ability to demonstrate compliance and good faith efforts. It seems the current housekeeping program is a benefit to all parties (MDNR, EPA, Boeing and the public) and therefore should be continued. However, since the programmatic approach is not required by the regulation, the APCP cannot prevent it.

require

The APCP cannot accept the first proposed approach by Boeing for two reasons. The inclusion of the phrase "(including flip-top or squirt bottles with small openings)" is unacceptable and is explained in detail in response to comment #2. The allowance of the installation having multiple opportunities for non-compliance with the work practices prior to the action being deemed a "deviation" is not an acceptable interpretation of the standard. Therefore, the APCP rejects Boeing's proposed interpretation, and will revise the permit condition to the following:

Emission Limitations:

(1) Housekeeping measures .

(a) Permittee shall institute and carry out a housekeeping program that requires the following:

(i) Place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or

other closed containers upon completing their use. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton-tipped swabs used for very small cleaning operations are exempt from this requirement.

(ii) Store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers.

(iii) Conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills.

(c) As part of the program required by (a) above, permittee shall conduct quarterly audits of handwipe cleaning operations to determine whether the specified work practices are being followed. During each audit, permittee shall document any observed instance where the specified work practices are not being followed and shall provide for prompt correction. Within one week, permittee shall re-audit any area where a previous audit documented an observed instance where the specified work practices were not being followed.

The APCP understands Boeing's concerns in regards to "upon completing their use", however the APCP does not agree with the proposed approach. The addition of the following phrase would relax the definition of compliance in regards to the phrase "upon completing their use".

"The use of cloth, paper or other absorbent applicator used for cleaning will not be considered to be completed until the end of the shift during which such applicator was in use. The failure to place all applicators in use during a shift into closed containers at the end of the shift is a deviation of this emission limitation.

Since the shifts at the Boeing installation are generally 8 hour shifts and each shift has the potential to use multiple applicators, it would not be an effective work practice standard to allow solvent laden applicators the opportunity to remain open to the atmosphere during the 8 hour shift. If the operator on the Boeing shift utilized only one applicator for an 8 hour period, it would be an effective work practice standard. However, since Boeing personnel use multiple applicators per shift, this is not an acceptable interpretation of the work practice standard. Themain goals of work practice standards are to minimize HAP emissions during normal operating procedures. Therefore, to maintain consistency with the compliance provisions in 40 CFR Part 63, Subpart GG, the clarification language

provided by Boeing will not be included in the operating permit. The APCP will modify the statement of basis to provide clarification in regards to the phrase "upon completion of use". Please refer to response to comment #2 for the detailed wording for the statement of basis clarification.

Comment #2:
St. Louis Item 3 and St. Charles Item 4

EPA Comment: EPA's objections generally reflect a view that individual permit conditions should restate the regulatory language verbatim and, particularly, that clarifying language should be removed from St. Charles permit (Conditions (B)(1) (page 19) and (C)(1) (page 20)) and the St. Louis Permit (Conditions EU0030-001, EU0030-002 and EU0050-001). Specifically, EPA objects to the underlined language quoted below:

1. *Housekeeping measures*
   a. *Workers shall place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in aerospace production in closed containers (such as plastic bags, dome top cans or step cans with the lids down) before leaving their work area. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain, as practicable, the vapors of the cleaning solvent. Cotton-tipped swabs or equivalent used for very small cleaning are exempt from this requirement.*
   b. *Store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers (such as flip-top or squirt bottles with small openings, safety cans or drums with closed bungs).*

Boeing Response: Regulations are often ambiguous and the facility and permitting agencies must regularly determine what the appropriate interpretation of a regulation is and how it applies to that facility's operations. Once these determinations have been made, incorporating those determinations in the Title V Permit allows all parties to clearly understand what the applicable requirement is and how it applies to the facility. To the extent that the relevant regulatory agencies have made determinations of applicability or provided authoritative guidance on the meaning of particular applicable requirements, such guidance and determinations should be reflected in the permit.

With respect to the phrase "(such as plastic bags, dome top cans or step cans with the lids down) before leaving their work area," Boeing would not object to removal of the parenthetical phrase, "(such as plastic bags, dome top cans or step cans with the lids down)," as it was merely intended to list the common types of containers used for inspection purposes, and removal would not adversely affect the clarity of this requirement. However, the phrase "before leaving the work area" was intended to

restrict what was meant by the regulatory language "upon completing their use." When cleaning an entire aircraft, the cleaning process may take the whole shift. Does that mean "upon completing their use" is at the end of the shift? When cleaning a series of individual parts in quick succession, does "upon completing their use" mean after each part is cleaned or after all the parts are cleaned and the continuous operation ceases? These vexing questions call for clarification in the permit, and Boeing would support inclusion of the clarifying language proposed in the previous item discussion, or the original language should DNR embrace the programmatic approach discussed in that comment.

With respect to the phrase "such as flip-top or squirt bottles with small openings," Boeing does not agree with EPA's statement that "there are no provisions in the regulation allowing storage in containers with 'small openings.'" That clarifying language was taken from the EPA's Aerospace NESHAP Q&A document which directed companies to work with their permitting authorities to clarify the closed container requirements. In an earlier version of the EPA's 10/1/98 Aerospace NESHAP Q&A, the answer to question 38 included "Examples of closed containers could include flip-top or squirt bottles with small openings, zip-lock plastic bags, drums and step-waste cans." That Q&A was later amended to read

> "...For example, if a lid is purposely propped open, that would not be considered a closed container, however, if a lid inadvertently has a small gap in the "closed" position, that would constitute a closed container. Again this is subject to the permitting authorities discretion, and it would be best to discuss any possible concerns with them."

This amended language again reflects EPA's understanding that closed containers can have small gaps and openings and still be "closed." However, recognizing that this is a fact dependent inquiry, EPA expressly left to the States the authority to determine under what circumstances a small gap or opening would be considered "closed." Based on the EPA Q&A, Boeing previously received from the County and DNR clarification that its flip-top bottles with small openings qualified as closed container and that determination is clearly documented in the Operating Permit.

Boeing is not aware of any other aerospace facility outside of EPA Region VII that has received guidance stating flip-top and squirt top bottles with small openings cannot be considered closed containers. Another aerospace facility in Region VII has been allowed to regard solvent squirt bottles with small openings as closed, as stated in a Kansas Department of Health and Environment ("KDHE") recission order (Source ID Number 1730019):

> "The EPA representative contacted other Regional Offices and determined that this type of container had been approved in another region as satisfying the requirements of 40 CFR Part 63, Subpart GG."

Given this Region VII determination, it is unfair to impose a more stringent interpretation on the Boeing facilities, thereby restricting their ability to compete on a level playing field with other aerospace manufacturing facilities.

Based on the above, Boeing requests that the permit language for both Permit No. OP1999052 and OP2001031 documents that examples of closed containers under the housekeeping measures include flip-top or squirt bottles with small openings.

Response to Comment #2: *Providing clarifying language in permit conditions regarding 40 CFR Part 63, Subpart GG was discussed in the January 22, 2003, meeting with EPA Region VII, Missouri Department of Natural Resources – APCP, St. Louis County Health Department – Air Program and Boeing. EPA Region VII stated clarifying language was an acceptable practice as long as the clarifying language does not relax the requirements of 40 CFR Part 63, Subpart GG. The APCP stated with respect to 40 CFR Part 63, Subpart GG, the Operating Permit Unit would prefer to include rule language in the permit conditions and utilize the statement of basis to provide clarification language for the permit condition. Therefore, clarifying language regarding permit conditions, determinations of applicability and guidance will be included in the statement of basis.*

With regards to the phrase "(such as plastic bags, dome top cans or step cans with the lids down) before leaving their work area." The parenthetical phrase will be removed from the permit condition and the clarifying language regarding the common types of containers will be included in the statement of basis.
With regards to the phrase "before leaving their work area", the APCP does not agree with the suggestion provided by Boeing. The permit condition will be modified to the original rule language:

> *"Place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers upon completing their use..."*

The statement of basis will also be modified to include clarifying language in regards to the questions raised in the comment. As stated previously in response to comment #1, the main goals of work practice standards are to minimize HAP emissions during normal operating procedures. When an operator is cleaning the entire aircraft and is utilizing only one applicator during the entire 8 hour period, it would be an effective work practice standard to interpret "upon completing their use" to be the end of the shift. When an operator is cleaning a series of parts in quick succession and is utilizing only one applicator during the cleaning of the parts, it would be an effective work practice standard to interpret "upon completing their use" to be the end of the successive cleaning of the parts.

With regards to the phrase "(such as flip-top or squirt bottles with small

openings, safety cans or drums with closed bungs)" the APCP understands and appreciates both Boeing and EPA's comments. However, after listening to both positions, the APCP agrees with EPA Region VII on the removal of the phrase from the permit condition. Boeing is correct the 1998 Q and A document for the Aerospace NESHAP contained a reference to flip-top or squirt bottles with small openings. However, in March 2001, the Q and A document for the Aerospace NESHAP was amended to revise the answer to question 38 to the following:

> *Question #38: What is the definition of "closed container" in the cleaning provisions?*
> *Answer #38: The rule does not provide a definition for "closed container," but does say (§63.744(a)(1)) that bags and containers should be kept closed at all times except when depositing or removing materials from the container. Also, bags or containers should be designed so as to contain the vapors of the cleaning solvent. This is not interpreted to mean that the container should be tested to be emission-free. Common sense would indicate that a close-fitting lid or closure device should be on the container, and that the container should be kept shut when not in use. For example, if a lid is purposely propped open, that would not be considered a closed container, however, if a lid inadvertently has a small gap in the "closed" position, that would constitute a closed container. Again this is subject to the permitting authorities discretion, and it would be best to discuss any possible concerns with them.*

Therefore, based on the updated Q and A document and discussions with EPA Regions VII and IX, neither a flip-top container nor squirt top bottles with small openings are closed containers. The statement of basis will be modified to include clarification on the flip-top and squirt bottle closures. For the flip-top container to be considered closed, the flip-top lid needs to be flush with the rest of the lid. In regards to the squirt top bottles, a squirt top bottle that contains a cap is not considered closed unless the cap is on top of the nozzle. In regards to a squirt top bottle with a floating ball closure, the squirt top bottle is considered closed if the floating ball is operating properly. The flip-top and squirt bottle closures may contain inadvertent openings when the flip-top cannot be made flush with the lid due to physical limitations of the cap or flip-top. The squirt bottle closures may contain inadvertent opening when the floating ball is operating properly, but due to physical design is not flush with the base of the nozzle.

In regards to the reference to a level playing field, the information provided by Boeing does not contain all of the details. The statement regarding another installation in Region VII (Kansas) being allowed to regard solvent squirt bottles with small openings as closed is incorrect, which was explained to Boeing and the APCP by EPA Region VII at the January 20, 2003, meeting. As stated in the January 20, 2003, meeting, EPA Region VII has taken formal

enforcement action against the Kansas installation on the flip-top and squirt bottles with small openings not being considered closed containers and the installation has ceased using flip-top and squirt bottles with small openings. Based on discussions with EPA Region IX, EPA Region VII is not the only EPA Region stating flip-top and squirt bottles do not constitute closed containers. The claim of Boeing being treated differently than other aerospace installations is incorrect, Boeing does have the ability to compete on a level playing field. Therefore, the phrase "(such as flip-top or squirt bottles with small openings, safety cans or drums with closed bungs)" has been removed from the permit condition and the statement of basis has been modified to provide clarifying language for flip-top and squirt bottle containers.

Comment #3:
St. Louis Item 7 and St. Charles Item 10

EPA Comment: EPA objects that the provisions of the St. Louis permit (Permit Conditions EU0060-001 and EU0100-001) relax the definition of compliance that "there is no underlying regulations that authorizes this relaxation of the definition of compliance." Specifically, EPA objects to the underlining language:

1. *Inorganic HAP Control*
   a. *Record the pressure drop (either electronically or manually) once each operating shift that inorganic HAP containing primer or topcoat is spray applied.*
      i. *The pressure drop records are deemed to be complete if 95% of the readings are recorded for all of the booths subject to this rule in any six (6) month period. If the last reading recorded correctly prior to any group of missed readings and the first reading recorded correctly after the same group of missed readings are both below the pressure drop limit, the missed readings are deemed to be below the pressure drop limit.*

Boeing Response: The intent of the provision is not to relax the definition of compliance, but rather to define what constitutes an acceptable record in those infrequent circumstances where an individual recorded electronic reading is inadvertently lost. Boeing has adopted an electronic information gathering system that continuously monitors, reads, and records the pressure drop on each affected paint booth and transmits that data to the environmental engineering department for recordkeeping and compliance purposes. Data gathered by that system and from other facilities shows that the pressure drop readings associated with the NESHAP regulated filter systems gradually increases over time in a predictably linear fashion as particulate matter builds up on the filter. Dips and spikes in the recorded readings do not generally occur.

With respect to the recordkeeping requirements, Boeing agrees that some form of record is required for every operating shift, but suggests that in the absence of a recorded electronic reading, that record can take the form of data extrapolated from electronically or manually recorded readings that do exist. In those instances where the electronic system fails to record or preserve a recorded pressure drop reading during a particular shift, based on the linear progression of the readings that are recorded, it is reasonable to fill in that data gap by extrapolating from the previously recorded reading and the subsequently recorded reading a value that would constitute the recorded value(s) for the operating shift(s). Thus, the recorded value(s) for the operating shift(s) would constitute the average of the previously recorded reading and the subsequently recorded reading. Having thereby recorded the pressure drop reading from the operating shift(s), the facility and the regulatory agencies can determine whether an exceedance occurred and whether enforcement is warranted. Of course, gap filling is only warranted where you have sufficient, reliable data to extrapolate the values of the records that are missing.

To clarify the foregoing intent of this provision, Boeing proposes to revise the permit language to read:

> *Record the pressure drop (either electronically or manually) once each operating shift that inorganic HAP-containing primer or topcoat is spray applied. For purposes of this permit condition, in the event that pressure drop readings are not electronically or manually recorded for particular operating shifts, but the facility has electronically or manually recorded the pressure drop readings for 95% or more of the operating shifts to which this condition applies in any six (6) month period, the recorded pressure drop reading for the operating shifts for which no electronic or manual record exists shall be deemed to be and shall consist of the average value of the pressure drop reading that was electronically or manually recorded for the operating shift(s) immediately preceding and following the operating shift(s) for which no electronic or manual record(s) exists.*

Boeing notes that the electronic system does provide additional safeguards against exceedances and believes that the foregoing provision encourages use of the electronic data system. Specifically, when the pressure drop reaches 70 percent of the manufacturer recommended limits, a yellow warning light is illuminated alerting the painters and maintenance that the filters require replacement. When the pressure drop reaches 100 percent of the manufacturer recommended limits, a red warning light is illuminated. These voluntary measures afforded by our electronic equipment provide additional safeguards against exceeding pressure drop limits during coating operations.

Consider also that the requirement to continuously monitor the pressure drop across the filters is analogous to continuous emission monitoring systems (CEMS) required by other regulatory regimes, including the Acid Rain Program. CEMS are required for either continual compliance determinations or determination of exceedances of

particular standards. However, the CEM rule contains procedures for filling in data when no valid hour or hours of data have been recorded by a monitor or monitoring system (see 40 CFR Part 75). The general procedure allowed for supplying missing data from CEMS in situations where 90% or more of monitoring data is available includes the averaging of real data collected before and after the missing period. We believe that these similar provisions provide additional justification for incorporating a gap filling procedure into the permit to aid determination whether there has been compliance with the NESHAP requirements.

Response to Comment #3:

The APCP understands and appreciates both Boeing and EPA's comments on the pressure drop record keeping measures in the St. Charles and St. Louis County permits identified above. The APCP once again applauds Boeing on the efforts to attempt to clarify requirements and demonstrate compliance with applicable requirements. However, after listening to both positions, the APCP agrees with EPA Region VII that the underlined language identified above is not authorized by 40 CFR Part 63, Subpart GG, relaxes the definition of compliance and therefore, cannot be incorporated in the Part 70 operating permit. According to §63.745(g)(2)(iv)(C), the installation shall "Continuously monitor the pressure drop across the filter and read and record the pressure drop once per shift." According to §63.745(g)(3),

> *"If the pressure drop across the dry particulate filter system, as recorded pursuant to § 63.752(d)(1), is outside the limit(s) specified by the filter manufacturer or in locally prepared operating procedures, shut down the operation immediately and take corrective action... The operation shall not be resumed until the pressure drop or water flow rate is returned within the specified limit(s).*

According to §63.752(e)(7):

> *"Each owner or operator shall record the actual pressure drop across the particulate filters ... once each shift in which the depainting process is in operation...This log shall include the acceptable limit(s) of the pressure drop as specified by the filter manufacturer, ..."*

In addition, the reporting requirements of §§63.753(d)(1)(vii) and (d)(2)(ii) require the following to be reported: "All periods where ... the control system "was not immediately shut down when the pressure drop...was outside the limit(s) specified" and the "number of times the pressure drop limit(s)...were outside the limits(s) specified."

There are no provisions in the regulations for reporting on a less frequent schedule than "once per shift." Therefore, the following sentence "The pressure drop records are deemed to be complete if 95% of the readings are recorded" is considered a relaxation of the requirement and has been removed from the permit condition. A valid pressure drop record, for the purposes of meeting these requirements, is one that has been recorded either manually or electronically, but does not include a value extrapolated later based on partially recorded data. Boeing has an electronic pressure-drop reading and recording system which in

"infrequent circumstances" may not retain a pressure-drop value. The fact that Boeing characterizes that this occurs only infrequently suggests that it is not necessary to attempt to provide additional detail regarding the recording and reporting of this data. An explanation of the occurrence of any missing data coupled with the extrapolated values where appropriate would appropriately be included with deviation and compliance reports submitted to MDNR and EPA.

Comment #4:
St. Louis Item 9

EPA Comment: EPA states that DNR should require prompt deviations reporting within 10 days and cites language from the Federal Register to the effect that "prompt should generally be defined as requiring reporting within two to ten days of the deviation."

Boeing Response: EPA's comments did not include the full text of the Federal Register Notice from July 13, 1995 [Federal Register, Volume 60, Number 134, pages 36083-36093]. The whole paragraph is listed below:

> e. "Prompt" Reporting of Deviations. The part 70 operating permits regulation requires prompt reporting of deviations from permit requirements. Section 70.6(a)(3)(iii)(B) requires the permitting authority to define prompt in relation to the degree and type of deviation likely to occur and the applicable requirements. Although state and county permit program regulations should define prompt for purposes of administrative efficiency and clarity, an acceptable alternative is to define prompt in each individual permit. The EPA believes that prompt should generally be defined as requiring reporting within two to ten days of the deviation. Two to ten days is sufficient time in most cases to protect public health and safety as well as to provide a forewarning of potential problems. For sources with a low level of excess emissions, a longer time period may be acceptable. However, prompt reporting must be more frequent than the semiannual reporting requirement, given this is a distinct reporting obligation under Sec. 70.6(a)(3)(iii)(A). Where ``prompt'' is defined in the individual permit but not in the program regulations, EPA may veto permits that do not require sufficiently prompt reporting of deviations. Maricopa, Pima, and Pinal have not defined ``prompt'' in their programs with respect to reporting of deviations. ADEQ has defined ``prompt'' as within 2 working days of the time when the deviation occurred (R18-2-306(A)(5)(b)).

As noted by the underlined text, EPA's discussion of deviation reporting does allow more than 10 days for "prompt" reporting. While Boeing agrees that 10 day reporting may be required in some instances, where a particular source poses only a potential for low levels of excess emissions in the event of a deviation, a period greater than 10 days can be considered. The Boeing facilities are large and complex, both in their physical operations and their organizational structure (over 14,000 employees work within 9

million square feet of building space). Given this complexity, Boeing suggests a period of time that corresponds with its internal processes for identifying, assessing, and reporting deviations that result in emissions limitations exceedances. Those processes are described in the table below.

Typical Number of Work Days*	Process
5	Gather facts, get fire department report (if applicable), do initial review, discuss with area supervision, formulate corrective action plan with affected departments, draft initial report to the agency
4	Area management team review of report
2	Legal review of report
1	Environmental and Hazardous Materials Services Manager review of report
1	Safety Health and Environmental Affairs Director review of report
1	Vice President General Services review of report
1	Responsible Official review of report and signature
* The number of days can fluctuate greatly depending on the availability of people (e.g., travel, vacation, flex schedule, etc.) and does not account for weekends and holidays.	

The number of days described above can fluctuate greatly depending on the availability of people (e.g., travel, vacation, flex schedule, etc.) and does not account for weekends and holidays. Boeing, therefore, requests consideration of a 20 to 30 day reporting period for those permit conditions which presently have the standard reporting paragraph. Given the type of operations and the past history of these sources, they could be classified as sources with a low level of excess emissions, for which the County and DNR have flexibility to allow a reporting period greater than 10 days. Those provisions are identified in the table below.

Permit Condition	Emission Limitations
PW002	Restricts the sulfur content of fuel oil and coal and has no requirements for propane and natural gas. (10 CSR 10-6.260)
PW003	Restriction of emission of visible air contaminants. (10 CSR 10-6.220)
PW004	Restricts fugitive particulate matter beyond the premises of origin. (10 CSR 10-6.170)
PW005	Restricts the VOC content of traffic coatings. (10 CSR 10-5.450)

EU0020-001	Restricts the VOC content of specialty coatings. (10 CSR 10-5.295)
EU0030-002	Restricts handwipe solvent cleaning housekeeping measures and vapor pressure. (10 CSR 10-5.295)
EU0040-001	Restricts operating procedures, equipment specifications, and operator/supervisor training from metal solvent cleaning operations. (10 CSR 10-5.300)
EU0060-002	Restricts emission of particulate matter from industrial sources. (10 CSR 10-5.050 This is based on a one-time compliance calculation.)
EU0060-003	Restricts VOC, HAP, and/or amount of paint that can be emitted from paint booths. (10 CSR 10-6.060)
EU0060-004	Restricts the VOC content of primer, topcoats, and specialty coatings. (10 CSR 10-5.295)
EU0080-002	Restricts the VOC and HAP content of primers and topcoats. (10 CSR 10-5.295)
EU0090-002	Restricts the maximum hourly heat input, sulfur content, nitrogen dioxide emissions, and ash content for the coal fired boiler. (10 CSR 10-6.060)
EU0110-001	Restriction of visible air contaminants from internal combustion engines. (10 CSR 10-5.180)
EU0140-003	This source no longer exists.
EU0150-001	This source now belongs to GKN.
EU0180-004	Restricts the Reid vapor pressure of gasoline in the ozone season. (10 CSR 10-5.443)
EU0200-002	Restricts operating procedures, equipment specifications, and operator/supervisor training from solvent metal cleaning operations. (10 CSR 10-5.300)

Response to Comment #4: *The Air Pollution Control Program understands Boeing's concerns and appreciates Boeing's position on the reporting of deviations. However, in order to maintain consistency in the operating permits in the state of Missouri, it would not be in the best interest of the APCP to treat Boeing differently than the other installations in the State. According to the March 20, 2002, EPA response to comments from The Ozark Chapter of the Sierra Club regarding deficiencies in the Missouri Title V Program with regards to prompt reporting of deviations, EPA found that Missouri's Title V program is not deficient. The reason the Missouri Title V program was not deficient is based on Missouri's routine practice of requiring all deviations to be reported within ten days of their occurrence. Therefore, to maintain consistency in the operating permits the ten day reporting period for deviations will not be modified as requested. Please note: the requirements of 10 CSR 10-6.0605(6)(C)1.C.(III)(d) allow the installation to submit a deviation report without a certification if the report is resubmitted with an appropriate certification within 10*

10 + 10 / 20 days which is what Boeing requested.

days after that.

Comment #5:
St. Louis Item 12 and St. Charles Item 8

EPA Comment: EPA states that all construction permits should be incorporated by reference.

Boeing Response. All applicable permit requirements should be clearly listed in the Title V operating permit. Incorporating the construction permit by reference adds emission unit descriptions, estimated utilization rates, and other terms that are not permit conditions. The Title V permit should clarify compliance requirements, not add ambiguity by referencing items that are not enforceable permit conditions.

Response to Comment #5: *This issue was discussed between EPA Region VII, the Missouri APCP, St. Louis County Health Department – Air Program and Boeing in a meeting January 21, 2003. This issue was discussed between Missouri APCP, St. Louis County Health Department – Air Program and Boeing in a conference call on January 23, 2003. On February 11, 2003, the Air Pollution Control Program sent an e-mail with Statement of Basis language to provide clarification of the documents incorporated by reference relating to construction permits.*

The APCP agrees with Boeing that the operating permit is required to contain all requirements applicable to the installation at the time of permit issuance. However, we disagree with Boeing's interpretation of incorporating the construction permits by reference. According to 10 CSR 10-6.060(6)(E)C., an installation is required to construct and operate in accordance with the application submitted and the permit issued.

> *"Any owner or operator who constructs, modifies or operates an installation not in accordance with the application submitted and the permit issued, including any terms and conditions made a part of the permit, or any owner or operator of an installation who commences construction or modification after May 13, 1982, without meeting the requirements of this rule, is in violation of this rule."*

Therefore, for the operating permit to include all applicable requirements, the construction permits are incorporated by reference. To aid in Boeing's understanding of the construction permits incorporation by reference, the following wording, which was e-mailed to Boeing on February 11, 2003, was added to the statement of basis.

> *"10 CSR 10-6.065, Operating Permits*
> *When a Construction Permit is incorporated into the Operating Permit, all aspects of the Construction Permit relating to emissions are to be maintained for an installation to be in compliance. According to 10 CSR 10-6.060, Construction Permits Required, the Construction Permit consists of both the issued permit and Construction Permit application.*

10 CSR 10-6.060 (6)(E)3. – "Any owner or operator who constructs, modifies or operates an installation not in accordance with the application submitted and the permit issued, including any terms and conditions made a part of the permit, or any owner or operator of an installation who commences construction or modification after May 13, 1982, without meeting the requirements of this rule, is in violation of this rule;"

Any installation that does not comply with the issued permit and Construction Permit application as it relates to emissions would be considered to be in violation of 10 CSR 10-6.060.

The Construction Permit application consists of numerous parameters that are not included in either the Construction Permit or the Operating Permit. Some examples of the criteria necessary for the application are site information; descriptions; plans; control efficiencies; flow parameters; design specifications; and drawings showing the design of the installation, the nature and amount of emission of each pollutant, and the manner in which emission units will be operated and controlled. These values submitted in the Construction Permit application define the criteria the regulatory agencies use to evaluate potential emissions and determine the ambient air quality of the surrounding area. It is essential the installation operate and construct the emission units according to the criteria related to emissions in the Construction Permit application, since the criteria are the basis behind the limitations established in the Construction Permit. If any of the parameters relating to emissions should change, the installation would be required to request and obtain a modification to their Construction Permit.

While an installation must adhere to their Construction Permit application, it is not necessary for the installation to certify and monitor each application parameter to show compliance. The installation is only required to monitor those parameters defined in specific State or Federal requirements or identified as Special Conditions in the Construction Permit. When construction permits are placed in Plant-wide and Emission Unit permit conditions in the Operating Permit, the installation is required to certify compliance with the parameters (monitoring, performance testing, record keeping and reporting) identified in the Plant-wide and Emission Unit permit conditions of the Operating Permit. However, the various parameters detailed in the Construction Permit application are still applicable to the installation, even though the criteria are not specifically listed in the Operating Permit. Since the entire Construction Permit is not integrated into the Operating Permit, it is necessary to establish that the installation is to operate according to the entire issued Construction Permit and Construction Permit application. To accomplish this action, it is essential for the agency to incorporate the documents by reference. When incorporating documents by reference, the agency does not intend for the installation to monitor each criteria, but rather for the installation to realize they are required to construct and operate within the boundaries submitted in the Construction Permit

application as well as the issued Construction Permit."

Comment #6:
St. Louis Item 21

EPA Comment: EPA states that the responsible official should certify all reports required by the permit.

Boeing Response: Some reports are of a minor nature (e.g., monthly coal reports) and it would be unreasonable and unduly burdensome to require the responsible official to routinely certify each such report.

Response to Comment #6: *The Air Pollution Control Program has discussed the Boeing response with EPA Region VII. According to 10 CSR 10-6.065(6)(C)1.C.(III)(d),*

> *"(III) With respect to reporting, the permit shall incorporate all applicable reporting requirements and require the following:*
>
> > *(d) Every report submitted shall be certified by a responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation; and"*

Therefore, the Air Pollution Control Program disagrees with Boeing and the reporting requirements identified in the permit conditions of the operating permit shall be certified by the responsible official.

Comment #7
St. Louis Item 33

EPA Comment: EPA suggests that the permit address CAM.

Boeing Response: Boeing would prefer to address CAM in Operating Permit No. OP1999052 for the Boeing-St. Charles facility in this permit revision. Boeing would prefer to postpone addressing CAM in Operating Permit No. OP2001031 for the Boeing St. Louis facility until the next permit revision.

Response to Comment #7: *The Air Pollution Control Program has discussed the Boeing response with EPA Region VII. Since Boeing would like to address CAM in the re-opening of operating permit OP1999-052 for the Boeing-St. Charles installation, the Air Pollution Control Program will be more than willing to address CAM and give the revised permit a new 5 year permit term. For the*

installation to receive the new 5 year permit term, the Air Pollution Control Program must also include the revisions to general provisions and periodic monitoring addressed in previous correspondence with EPA Region VII, Sierra Club and response to public comments.
Since Boeing would prefer to not address CAM in the re-opening of operating permit OP2001-031 for the Boeing – St. Louis installation and address it in the next permit revision, the Air Pollution will not address CAM and the revised permit will not receive a new 5 year permit term. The revised permit for OP2001-031 will have the same expiration date as the initial operating permit (April 13, 2006).

BOEING COMMENTS TO DRAFT REVISED PERMIT OP1999052
(Installation ID: 183-0010/Project No. 2002-12-050)

April 14, 2003, Comment Letter from Yvonne Pierce of Boeing

I. PREVIOUS COMMENTS

Boeing submitted comments regarding EPA's request that permit OP1999052 be reopened for cause in its letter 464C-5371-AYP dated February 20, 2003. Boeing reiterates those comments and expressly incorporates those comments herein. Boeing would appreciate a written response to these comments.

Response to Comments: Please refer to Response to Comment #1-7 from the February 20, 2003 comment letter.

II. GENERALLY APPLICABLE COMMENTS

Comment #1
Supplemental Reporting Provisions

Throughout the draft permit, MDNR has inserted ten (10) day supplemental reporting provisions that similarly provide:

> "The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation."

These supplemental reporting provisions differ significantly from the supplemental reporting requirements identified in the original permit and Boeing requests that the following modifications be made:

(1) Throughout the supplemental reporting provisions in the draft permit, delete the phrase "or any malfunction which could cause an exceedance of this regulation." Boeing is unaware of any legal basis for requiring prompt reporting of "malfunctions which could possibly cause an exceedance." Absent an actual deviation from the permit requirements, section 10-6.065(6)(C)1.C.(III) of the State operating permit regulations does not require or provide for a supplemental reporting requirement in the permit. Any supplemental reporting requirements included in the permit should therefore only apply to instances where a deviation from the permit requirements has occurred.

(2) Throughout the supplemental reporting provisions in the draft permit, delete the phrases to the effect, "exceedance of any of the terms imposed by this regulation" and replace with phrases to the effect, "exceedance of the above emission limitations." Boeing understands the intent of the Title V permit is to state all requirements

applicable to the facility and further understands that the supplemental reporting requirements are intended to identify deviations from permit requirements. Indeed, the federal regulations require only "prompt reporting of deviations from permit requirements." 40 C.F.R. § 70.6(a)(3)(iii)(B) (emphasis added). Reference to the regulation or matters extraneous to the permit is therefore inappropriate and potentially leads to ambiguity as to what requirements the facility is subject. Boeing recommends therefore that the supplemental reporting requirements make reference only to the permit requirements, rather than the underlying regulation or other matters.

(3) Throughout the supplemental reporting provisions in the draft permit, limit supplemental reporting, as appropriate, to deviations from the emissions limitations specified in the permit (see language in preceding comment). As proposed, the supplemental reporting provisions generally require supplemental reporting of any deviation, including minor recordkeeping issues and deviations that have no potential for excess emissions. Supplemental reporting for such deviations is unnecessary, as these matters will be identified in the semi-annual monitoring reports and as exceptions to the annual compliance certifications. More frequent reporting of such matters does not serve any legitimate administrative or environmental purpose. Moreover, preparation of supplemental reports for minor issues, requiring extended internal review and execution by the facility responsible official, will place an undue burden on the facility and divert resources from other environmental compliance efforts. EPA itself has recognized that "prompt reporting" of every deviation is not required where reporting more frequently than the semi-annual monitoring report "would provide no measurable environmental benefit, yet may be unnecessarily burdensome to the source." In re North Shore Towers Apartments, Inc., Petition Number II-2000-06, pages 18-19. Indeed, per the federal regulations, it is apparent that blanket reporting of deviations that don't involve excess emissions is not required under the supplemental or prompt reporting requirements of the Title V program. Those regulations state: "The permitting authority shall define 'prompt' in relation to the degree and type of deviation likely to occur and the applicable requirement." 40 C.F.R. § 70.6(a)(3)(iii)(B). Where the deviation is of a type and degree that does not involve excess emissions, and semi-annual or annual reporting is otherwise required, it is appropriate to defer reporting of those deviations to the semi-annual monitoring and annual compliance certification reports. To the extent, however, that deviations from emissions limitations may result in excess emissions, supplemental reporting may serve a beneficial purpose and be appropriate. Boeing therefore recommends that the supplemental reporting provisions be limited to deviations from the emissions limitations specified in the permit.

(4) Throughout the supplemental reporting provisions in the draft permit, tailor the periods for submittal of supplemental reports to reflect the degree and type of deviation that is likely to occur. As noted above, "prompt" or supplemental reporting must be defined in relation to consideration of those factors. However, DNR has proposed a blanket 10 day reporting requirements for all deviations without any

apparent regard for whether ten days or a longer period is appropriate for the degree or type of deviation involved. As previously noted by Boeing in its letter 464C-5371-AYP, dated February 20, 2003, EPA has expressly recognized that longer reporting periods (i.e., greater than ten days) may be appropriate "[f]or sources with a low level of excess emissions . . . ." See Federal Register, Volume 60, Number 134, pages 36083-36093 (July 13, 1995). In addition, the size and complexity of Boeing's operations makes it difficult to comply with a blanket 10 day reporting period. Boeing therefore recommends that DNR give consideration to the degree to which deviation from a particular emission limitation will result in excess emissions and provide for a 20 to 30 day reporting period for those deviations that are likely to result only in low levels of excess emissions.

(5) With respect to supplemental reports for deviations from operations that are specifically required to be reported by the underlying regulation, delete the supplemental reporting requirement for that unit or source. Boeing notes that several of its operations are subject to stringent, detailed reporting requirements independent of the supplemental reporting requirements of the Title V program. For instance, under the Aerospace NESHAP, Boeing is required to report every six months on the VOC/HAP content of its primers and topcoats and certify that it was in compliance with the VOC/HAP content limits for those primers and topcoats. To the extent that underlying regulation, such as the Aerospace NESHAP, specifies a periodic reporting requirement, it is appropriate to omit duplicative reporting under the supplemental reporting provisions of the Title V program. This is supported by the federal regulations which required that "prompt reporting" be "defined in relation to . . . the applicable requirement." 40 C.F.R. § 70.6(a)(3)(iii)(B). Where the applicable requirement itself defines an appropriate reporting period, that reporting requirement and period should be deemed sufficient to satisfy the Title V supplemental reporting requirements. This view is supported by several EPA decisions that recognize that more frequent deviations reporting is not required where the applicable requirement provides for specific, periodic reporting of deviations. See, e.g., In re North Shore Towers Apartments, Inc., Petition Number II-2000-06, pages 18-19; In re Lovett Generating Station, Petition No. II-2001-07, pages 12-14.

Response to Comment #1: *The APCP agrees with some of Boeing's concerns regarding malfunctions which could possibly cause an exceedance. As requested in paragraph (1) above, the supplemental reporting requirement will be modified to remove the phrase "or any malfunction which could possibly cause an exceedance" and include the phrase "or any malfunction which causes an exceedance of this regulation".*
The APCP disagrees with Boeing's interpretation regarding paragraph (2). This issue was discussed in the January 22, 2003, meeting with EPA Region VII, MDNR-APCP, St. Louis County Local Agency and Boeing. The APCP agrees the operating permit is to include all applicable requirements and supplemental reports in regards to deviations. However, the emission limitations are not the only portion of a regulation an installation must comply with. The permit condition and/or

applicable requirement may establish operating parameters of process equipment and/or control devices, and monitoring/record keeping/reporting requirements to demonstrate compliance with emission limitations. Therefore, the installation needs to report deviations in emission limitations, operating parameters, monitoring, record keeping and reporting to indicate the compliance status of the installation. In addition, permit conditions reference sections of 40 CFR Part 60, 40 CFR Part 61 and/or 40 CFR Part 63 requirements. Therefore, the inclusion of the phrase "exceedance of any of the terms imposed by this regulation" is needed in the supplemental reporting requirements and will not be modified as requested. In regards to paragraph (3), the APCP disagrees with a portion of Boeing's interpretation of the EPA Order granting in part and denying in part the petition for object to the North Shore Towers Apartments, Inc Title V operating permit. According to the EPA Order Section II.G., Prompt Reporting of Deviations:

> *"The Petitioner's seventh claim is that the proposed permit does not require prompt reporting of all deviations from permit requirements as mandated by 40 CFR § 70.6(a)(3)(iii)(B). See petition at page 16. The Petitioner states that the only prompt reporting of deviations is that required by 6 NYCRR § 201-1.4, which governs unavoidable noncompliance and violations during necessary scheduled equipment maintenance, start-up/shutdown conditions and upsets or malfunctions. Thus, the Petitioner argues, any other deviations, including situations where the permittee could have avoided a violation but failed to do so, will not be reported until the 6 month monitoring report. The Petitioner alleges that 6 months cannot be considered "prompt reporting" in all cases. The provisions that govern reporting of violations are: Condition 20 of 17 the draft permit, Condition 19 of the June 22, 2000 permit, and Condition 1-2 of the August 7, 2001 permit.*
>
> *In general, EPA agrees with the Petitioner's comment.[18] However, while Condition 1-2 of the August 7, 2001 permit refers only to unavoidable violations, prompt reporting of deviations is required by other portions of the North Shore Towers permit, as revised.*
>
> *States may adopt prompt reporting requirements for each condition on a case-by-case basis, or may adopt general requirements by rule, or both. In any case, States are required to consider prompt reporting of deviations from permit conditions in addition to the reporting requirements of the explicit applicable requirements. As discussed above, EPA does not consider reports submitted for the purpose of preserving potential claims of an excuse to meet prompt reporting requirements because these reports are optional, and they may not include all deviations, instead only those potentially unavoidable violations that the source seeks to have excused. All deviations must be reported regardless of whether the source qualifies for an excuse. Whether the DEC has sufficiently addressed prompt reporting in a specific permit is a case-by-case concern under the rules applicable to the approved program, although a general provision applicable to various situations may also be applied to specific permits as EPA has done in 40 CFR § 71.6(a)(3)(iii)(B).[19]*
>
> *In the subject case, there are several provisions in the August 7, 2001 permit that*

appropriately require that prompt reports be made to the DEC (Conditions 1-7, 1-8, 1-19, 1-21 and 56). These relate to the daily monitoring for opacity. That is, when daily observances require that a Method 9 test be performed, and that test indicates a violation, the facility owner/operator must contact the DEC representative within one business day of the test and, upon notification, any corrective actions or future compliance schedules are to be presented to the DEC for acceptance. This is an appropriate use of the prompt reporting mechanism as it gives discretion to the DEC representative whether to require that a written timely report be filed within a relatively short time frame (in cases where the contravention is significant), or whether to defer the written report until the 6-month monitoring report. In either case, the source will provide a written report of the incident. With respect to the other applicable requirements that relate to emission limitations, reporting deviations more frequently than every 6 months or within the time frame established by the applicable requirement, whichever is sooner, is not necessary. Where stack tests are required for NO_x emissions, the test protocols will set forth the reporting requirements of the test results. Normally, test results must be reported within 30-days of the test. This is also the case for the once per permit term requirement to perform a Method 9 test for opacity. Each engine-generator and boiler will also undergo annual tune-ups pursuant to NO_x RACT requirements, during which adjustments will be made to optimize boiler combustion efficiency and thereby minimize emissions. Requiring the source to report the results of such tune-ups more frequently than the 6-month reporting requirement would provide no measurable environmental benefit, yet may be unnecessarily burdensome to the source. Finally, the sulfur content of the fuel-oil must be monitored by submission of a report, from the supplier to the facility, for each fuel-oil delivery. Because it is highly unlikely that fuel-oil outside of the specifications would be delivered and used, deferring the monitoring reports to the 6-month report is also appropriate in this case. Thus, EPA denies the petition on this issue.

Although DEC properly applied the prompt reporting requirement in this case, EPA has addressed this issue with the DEC in order to clarify how it will properly exercise this discretion. In its November 16, 2001 letter, DEC agreed that it will include a requirement for reporting deviations consistent with 6 NYCRR § 201-6.5(c)(3)(ii). Based on EPA's program review, the DEC is substantially meeting this commitment. See note 3, supra. While this regulation requires inter alia that deviations be reported at least every six months, DEC stated that it will specify less than six months for "prompt" reporting of certain deviations that result in emissions of, for example, a hazardous or toxic air pollutant that continues for more than an hour above permit limits. DEC has scrutinized the procedures for prompt reporting contained in 40 CFR § 71.6(a)(3)(iii)(B), and finds these procedures to be reasonable and compatible with what is provided for in DEC regulations. Therefore, DEC is mirroring these provisions to define "prompt" reporting in permit conditions. When prompt reporting of deviations is required, the reports will be submitted to the DEC, in writing, certified by a responsible official, and in the time frame established in the permit condition. As

discussed in detail in Section H, below, EPA is granting in part the NYPIRG petition for North Shore Towers. Therefore, when DEC revises the permit in response to this Order, it will also incorporate these additional prompt reporting requirements into the permit. "

The APCP is handling the reporting of deviations similar to the EPA response to the petition. The APCP requires installations to report within ten days of an exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation. The EPA Order states, "In any case, States are required to consider prompt reporting of deviations from permit conditions in addition to the reporting requirements of the explicit applicable requirements." and "All deviations must be reported regardless of whether the source qualifies for an excuse." The APCP does not require the submission of tune-up or inspection reports unless the tune-up or inspection report indicates an exceedance of the permit terms or regulation. The APCP does not require the reporting of Method 22 or Method 9 observations unless the Method 9 observations indicate an exceedance of the permit terms or regulation. The APCP is being consistent with the EPA Order, therefore, no changes will be made to the permit conditions as requested. However, if Boeing would like specific clarification on certain reporting requirements, the APCP will be more than willing to include that in the statement of basis.

In regards to paragraph (4), please refer to Response to Comment #2 from the February 20, 2003 comment letter.

In regards to paragraph (5), the APCP disagrees with Boeing's interpretation. According to the EPA Order:

"States may adopt prompt reporting requirements for each condition on a case-by-case basis, or may adopt general requirements by rule, or both. In any case, States are required to consider prompt reporting of deviations from permit conditions in addition to the reporting requirements of the explicit applicable requirements."

Therefore, if an installation deviates from the permit conditions or requirements, the installation is required to provide prompt reports. As stated previously, if Boeing would like specific clarification on certain reporting requirements, the APCP will be more than willing to include that in the statement of basis.

Comment #2
Inclusion of Recordkeeping Forms

Throughout the draft permit, DNR has made reference to DNR created recordkeeping forms, which are incorporated as attachments to the permit, and specified that Boeing shall use the referenced forms or an equivalent form to satisfy the recordkeeping requirements of the applicable requirement. While Boeing is appreciative of DNR's efforts to fashion these forms, Boeing is extremely concerned that inclusion of these forms will limit its ability to adopt efficient recordkeeping practices and respond to changes in its operations and technological improvements in data gathering and storage. As an initial matter, the phrasing in the permit appears to constrain Boeing

to the use of paper "forms." No allowance is made for the use of electronic data gathering, storage and retrieval systems, which are capable of recording information required by an applicable requirement in less than tangible forms. Boeing makes wide use of such data systems, including standard Access and Excel databases, to record required information. In some instances, this data may be collected and stored by a single electronic system or database. However, in other instances, required information may be recorded and maintained by separate and independent systems and databases, which collectively satisfy the recordkeeping requirements of a particular applicable requirement. In either case, there may be no "form" maintained, although the required information is recorded, maintained, and accessible on site and may be retrieved as needed to satisfy the facility's recordkeeping needs and requirements. Any permit provision that constrains use of these systems should be deleted.

Response to Comment #2:

The intent of the record keeping attachments is to provide an example of the minimum criteria needed to demonstrate compliance with the record keeping provisions. There is no intent to limit Boeing's ability to adopt efficient record keeping practices and respond to changes in its operations and technological improvements in data gathering and storage. There is no intent to force Boeing to use the record keeping attachments and maintain "paper" records. If Boeing maintains electronic monitoring forms that contain the minimum criteria identified in the record keeping provisions and attachments, the electronic forms will be an acceptable record keeping process. However, if the electronic forms do not contain the minimum criteria identified in the permit condition and record keeping attachment, the installation could be found in violation of the record keeping requirements of the permit condition. The APCP disagrees that the record keeping attachments in the operating permit constrain Boeing in any manner. However, in order to alleviate the concerns of Boeing, the following wording will be added to the record keeping provisions of the permit conditions that reference record keeping attachments:

"Attachment A contains a log including these record keeping requirements. This log (written or electronic), or an equivalent created by the permittee (written or electronic), must be used to certify compliance with this requirement."

"The permittee shall maintain records (written or electronic) of all observation results (see Attachments B and C), noting..."

Comment #3

General NESHAP Reporting Requirements

MDNR has generally referenced the general NESHAP reporting provision in 40 C.F.R. § 63.10 (a), (b), (d), and (f). To aid clarity and clearly identify the reporting requirements applicable to each unit, please list the specific reporting requirements in § 63.10 (a), (b), (d), and (f) that are applicable to the unit or source.

We have been operating under the premise that when startup, shutdown or

malfunction does not result in an exceedence, no recordkeeping is required for the same policy reasons underlying the Agency's determination on SSM reporting. This premise is based on the identical treatment of reporting and recordkeeping in the March 16, 1994 preamble to the General Provisions. (59 FR 12408, 12422 Section IV.F.3 (para 2) ("When no excess emissions occur under this approach, no records or reports are required."). We would appreciate your written confirmation in our Title V permit that our understanding is agreeable to MDNR for all of our Aerospace NESHAP sources.

Response to Comment #3:

As requested, the APCP has added the specific reporting requirements in §63.10(a), (b), (d) and (f) applicable to each emission unit. In addition, the clarification has been added to the statement of basis explaining why certain reporting provisions were not included in the operating permit emission unit conditions.

In regards to the start-up, shutdown and malfunction plans, and record keeping and reporting requirements, the information in the above comment contains a portion of the pre-amble and does not identify all of the record keeping and reporting provisions. According to the March 16, 1994 preamble of the General Provisions,Section IV.F.3 paragraphs 1 and 2

> *"Some commenters said that startup, shutdown, and malfunction reports should only be required (at least in the case of area sources) when excess/reportable emissions to the atmosphere occurred as a direct result. Commenters requested that the EPA should encourage sources to discover ways not to emit amounts of pollutants in excess of applicable standards, or not to exceed established parametric limits, during periods of startup, shutdown, and malfunctions by inserting the concept of "emissions in excess of an otherwise applicable standard or operation outside of established parametric requirements" into the definitions of startup, shutdown, and malfunction situations. If a source does not experience a period where some emission or parameter requirement is exceeded, no records or reports should be required, according to commenters. In addition, commenters stated that the requirement that a responsible corporate official certify a report of action taken under a startup, shutdown, and malfunction plan is well beyond statutory authority and should be withdrawn.*
>
> *As discussed below, the EPA has changed the General Provisions to clarify that startup, shutdown, and malfunction reports need only address events that cause emissions in excess of an otherwise applicable standard or operation outside of an established parametric requirement. This change will encourage owners and operators to maintain emissions at all times to the levels required by the standard. When no excess emissions occur under this approach, no records or reports are required. On the other hand, if an owner or operator fails to record the necessary information when excess emissions do occur, they cannot certify compliance with the startup, shutdown, and malfunction plan."*

Therefore, as stated in the preamble, when no excess emissions occur under this approach, no records or reports are required.

However, please note another section of the preamble deals with record keeping and

reporting procedures when following or not following the start-up, shutdown and malfunction plan. According to the March 16, 1994 preamble of the General Provisions,Section IV.F.3 paragraphs 4 and 5

> *"Commenters also said that the EPA should provide flexibility to owners and operators in correcting malfunctions rather than requiring that actions be "completely" consistent with the source's startup, shutdown, and malfunction plan. It is impossible for owners and operators to develop plans that address every conceivable malfunction. Instead, the EPA should require that actions be "materially" consistent with the plan.*
>
> *One purpose of the startup, shutdown, and malfunction reports is to provide an explanation of why the plan was not followed during a startup, shutdown, or malfunction. Presumably, an owner or operator cannot certify compliance with the standards for such events. In the event of a startup, shutdown, or malfunction, the Agency believes there is value in receiving these reports for actions that are not consistent with the plan. These reports establish an historical record for review by the enforcing agency. However, in order to respond to commenters' concerns, the regulation has been revised to remove the word "completely" from the phrase "completely consistent" in §§ 63.6(e)(3)(iii) and (iv) and §63.10(b)(2)(v). This revision still satisfies the Agency's intent to receive reports for actions that are not consistent with the plan."*

Therefore, when an installation deters from the procedures in the startup, shutdown and malfunction plan, reports are required, regardless of the emissions, for actions that are not consistent with the plan.

Comment #4

Inclusion of an "Operational Limitation" Section

In some Permit Conditions a section called "Operational Limitation" is listed. What is the intent of this section? Is MDNR differentiating work practice standards from other emission limitations? For example, should the Condition EU0030-001 "Housekeeping measures" section and "Compliance-Cleaning Operations" paragraph be put into an "Operational Limitation" section?

Response to Comment #4:

"Operational Limitation" is a sub-heading of a permit condition being referred to in the comment. The emission standards portion of regulations generally contain emission limitations, operational limitations and/or work-practice standards. The operating permit format attempts to separate the emission standards portion of regulations into sub-categories such as numerical emission limits, operational limitations and/or work practice standards to help understand the different types of limitations and improve the readability of the permit. This process helps break up long sections and makes it easier for the reader to follow the permit conditions. However, when there are not separate sub-categories in the emission standards of applicable regulations, the operating permit format groups the Emission Limitation and the Operational Limitation under one category. In either case, the limitations

under both categories must be maintained and upheld, otherwise an installation would be in violation of their Operating Permit. The agency will make an effort to separate limits between "Emission Limitation" and "Operational Limitation" when applicable. Therefore, EU0030-001 has been changed the category heading from "Emission Limitation" to "Emission Limitation/Operational Limitation." The revised permit condition is included below.

"***Emission Limitation/Operational Limitation:***

- Housekeeping measures - The permittee shall comply with the following requirements:
  1. Place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed upon completing their use. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton-tipped swabs used for very small cleaning are exempt from this requirement. (§63.744(a)(1))
  2. Store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers. (§63.744(a)(2))
  3. Conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills. (§63.744(a)(3))
- Spray gun cleaning.

1. The permittee shall use one or more of the techniques, or their equivalent, specified in §63.744(c)(1)-(c)(4). Spray gun cleaning operations using cleaning solvent solutions that contain HAP and VOC below de minimis levels specified in §63.741(f) are exempt from the requirements in §63.744(c)(1)-(c)(4).(§63.744(c))
   a. Enclosed System. Clean the spray gun in an enclosed system that is closed at all times except when inserting or removing the spray gun. Cleaning shall consist of forcing the cleaning solvent through the gun. If leaks are found during the monthly inspection required in §63.751(a), repairs shall be made as soon as practicable, but no later than 15 days after the leak was found. If the leak is not repaired by the 15th day after detection, the cleaning solvent shall be removed and the enclosed cleaner shall be shut down until the leak is repaired or its use is permanently discontinued. (§63.744(c)(1)(i) and (ii))
   b. Nonatomized cleaning. Clean the spray gun by placing cleaning solvent in the pressure pot and forcing it through the gun with the atomizing cap in place. No atomizing air is to be used. Direct the cleaning solvent from the spray gun into a vat, drum, or other waste container that is closed when not in use.(§63.744(c)(2))
   c. Disassembled spray gun cleaning. Disassemble the spray gun and clean the components by hand in a vat, which shall remain closed at all times except when in use. Alternatively, soak the components in a vat, which shall remain closed during the soaking period and when not inserting or removing components. (§63.744(c)(3))

d. Atomizing cleaning. Clean the spray gun by forcing the cleaning solvent through the gun and direct the resulting atomized spray into a waste container that is fitted with a device designed to capture the atomized cleaning solvent emissions. (§63.744(c)(4))
e. Cleaning of the nozzle tips of automated spray equipment systems, except for robotic systems that can be programmed to spray into a closed container, shall be exempt from the requirements of §63.744(c). (§63.744(c)(5))

- Compliance -Cleaning Operations - Each cleaning operation subject to this subpart shall be considered in noncompliance if the permittee fails to institute and carry out the housekeeping measures required under §63.744(a). Incidental emissions resulting form the activation of pressure release vents and valves on enclosed cleaning systems are exempt from this paragraph. (§63.749(c))

1. *Spray gun cleaning.* An affected spray gun cleaning operation shall be considered in compliance when each of the following conditions is met: (§63.749(c)(2))
   a. One of the four techniques specified in §63.744 (c)(1) through (c)(4) is used; (§63.749(c)(2)(i))
   b. The technique selected is operated according to the procedures specified in §63.744 (c)(1) through (c)(4) as appropriate; and (§63.749(c)(2)(ii))
   c. If an enclosed system is used, monthly visual inspections are conducted and any leak detected is repaired within 15 days after detection. If the leak is not repaired by the 15th day after detection, the solvent shall be removed and the enclosed cleaner shall be shut down until the cleaner is repaired or its use is permanently discontinued. (§63.749(c)(2)(iii))

- Except as provided in §63.741(e), the owner or operator of each facility subject to 40 CFR Part 63, Subpart GG that produces a waste that contains HAP shall conduct the handling and transfer of the waste to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills. (§63.748)

For those wastes subject to 40 CFR Part 63, Subpart GG, failure to comply with the requirements specified in §63.748 shall be considered a violation. (§63.749(i))"

Comment #5
Aligning Aerospace NESHAP and Title V Reports

Boeing requests a change of the reporting schedule of the semiannual and annual reports required by the National Emission Standards for Aerospace Manufacturing and Rework Facilities ("Aerospace NESHAP") to align with the Title V Operating Permit reporting dates, as provided by 40 CFR §§63.10(a)(5), 63.9(i), and 40 CFR §63.753(a)(3). The General Provisions to the NESHAP regulations provide:

> If an owner or operator of an affected source in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports

that is consistent with the reporting frequency(ies) specified for such source under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State...Procedures governing the implementation of this provision are specified in §63.9(i).

40 CFR §63.10(a)(5). Additionally:

> Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to he Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place...If, in the Administrator's judgement, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment.

40 CFR §63.9(i)(2) and (3).

The current Aerospace NESHAP reporting periods resulted from the timing of the implementation of 40 CFR Part 63, Subpart GG and the May 1, 1999 due date of the Initial Notification of Compliance Status submittal required by that regulation and the General Provisions (40 CFR §63.9(h)). Semi-Annual reports thereafter are due on November 1 (for reporting periods covering March 1 through August 31) and May 1 (for reporting periods covering September 1 through February 28) of each year. Annual reports are due May 1 (for the March 1 through February 28 reporting periods) of each year. Boeing had previously requested permission to align the Aerospace NESHAP with the Title V reporting periods and submission dates as documented in our current Title V permit. By aligning these reports Boeing can track the relevant information and prepare the required reports in parallel. Aligning the reporting schedules enhances our efficiency and saves time and effort by allowing the preparation of reports at the same time for the same reporting periods, instead of having to duplicate work for each report. Please document reporting schedule changes in the statement of basis.

Response to Comment #5:

According to the procedures identified in 40 CFR Part 63, Subpart A, §63.9(i), the installation must request approval of adjustments to time periods from the Administrator. According to the July 10, 1998, Memorandum from EPA entitled, "Delegation of 40 CFR Part 63, General Provisions Authorities to State and Local Air Pollution Control Agencies", the provisions of §63.9 and §63.10 regarding approval of adjustments to time periods for submitting reports may be delegated.

On February 7, 2000, Bret Spoerle of Boeing submitted a request to Roger Randolph of the Air Pollution Control Program for alignment of the Aerospace NESHAP and Title V reporting deadlines. The alignment schedule requested to start on April 1, 2000, as follows:

"1. Due on April 1 of each year: Title V Annual Compliance Certification and Aerospace NESHAP Annual Report, for the period of January through December.

2. *Due on April 1 of each year: Title V Semi-annual Monitoring Report and Aerospace NESHAP Semi-annual Report, for the period of July through December.*
3. *Due of October 1 of each year: Title V Semi-annual Monitoring Report and Aerospace NESHAP Semi-annual Report, for the period of January through June."*

On March 21, 2000, Tanya Black of Air Pollution Control Program responded to Bret Spoerle of Boeing, agreeing with the schedule outlined above. Therefore, the operating permit conditions will be modified to reflect the above schedule and the statement of basis will be modified to explain the alignment of the reporting requirements.

The following has been included in the Statement of Basis to explain the reporting schedule changes.

"40 CFR Part 63, Subpart GG- *National Emission Standards for Aerospace Manufacturing and Rework Facilities*

As provided by 40 CFR §§63.10(a)(5), 63.9(i), and 40 CFR §63.753(a)(3). The General Provisions to the NESHAP regulations provide:

> If an owner or operator of an affected source in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such source under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State…Procedures governing the implementation of this provision are specified in §63.9(i).

The current Aerospace NESHAP reporting periods resulted from the timing of the implementation of 40 CFR Part 63, Subpart GG and the May 1, 1999 due date of the Initial Notification of Compliance Status submittal required by that regulation and the General Provisions (40 CFR §63.9(h)). Semi-Annual reports thereafter are due on November 1 (for reporting periods covering March 1 through August 31) and May 1 (for reporting periods covering September 1 through February 28) of each year. Annual reports are due May 1 (for the March 1 through February 28 reporting periods) of each year. On February 7, 2000, Boeing requested permission

to align the Aerospace NESHAP with the Title V reporting periods and submission dates as follows:

"1. Due on April 1 of each year: Title V Annual Compliance Certification and Aerospace NESHAP Annual Report, for the period of January through December.

2. *Due on April 1 of each year: Title V Semi-annual Monitoring Report and Aerospace NESHAP Semi-annual Report, for the period of July through December.*
3. *Due of October 1 of each year: Title V Semi-annual Monitoring Report and Aerospace NESHAP Semi-annual Report, for the period of January through June."*

On March 21, 2000, the APCP accepted the alignment schedule for the Title V and Aerospace

Comment #6
Applicability Clarification

Prior to the section for 40 CFR Part 63 Subpart GG emission units insert a clarifying note that the requirements apply to only those processes regulated by 40 CFR subpart GG. There are many exemptions listed in § 63.741 and throughout the Aerospace NESHAP that may be too numerous to list under each emission unit. For example, a clarifying note was placed on page 26 prior to the Emission Limitation for EU0120 through EU0130-001. Please also ensure that 10 CSR 10-5.295 exemptions are listed in the permit or a clarifying note is inserted prior to these sources.

Response to Comment #6:

The main objective of the Part 70 (Title V) operating permits is to accomplish the task of identifying and recording existing applicable requirements to regulated sources and assure compliance with the requirements. This requires the Part 70 operating permits to include all applicable requirements in the permit. The statement of basis attached to the Part 70 operating permit is the area where rule applicability, permit determinations and supporting information for emission limitation, performance testing, monitoring, record keeping and reporting provision streamlining are explained. Since the operating permit requires the identification of applicable requirements, stating the rule exemptions prior to the emission units subject to 40 CFR Part 63, Subpart GG and 10 CSR 10-5.295 within the permit is not needed. However, to ease the concerns of Boeing the exemptions will be stated in the general provisions portion of the operating permit under the Permit Shield Heading with the following lead in paragraphs:

"At the time of permit issuance, the following equipment was exempt from the requirements of 10 CSR 10-5.295"

"At the time of permit issuance, the following equipment was exempt from the requirements of 40 CFR Part 63, Subpart GG"

The statement of basis provides the best area for placing rule applicability

determinations regarding exempt units. Therefore, the statement of basis regarding the MACT Applicability of 40 CFR Part 63, Subpart GG and Other Determination for 10 CSR 10-5.295 will be modified to identify all of the exemptions included the applicability portions of 40 CFR Part 63, Subpart GG and 10 CSR 10-5.295, respectively. The statement of basis will provide explanation that the exemptions identified in 40 CFR Part 63, Subpart GG and 10 CSR 10-5.295 are not subject to the requirements of 40 CFR Part 63, Subpart GG and 10 CSR 10-5.295, respectively.

Comment #7
General Construction Permit Clarifications

Please update the referenced emission units in the emission limitations for the construction permits (listed under various emission units) to reflect the current operations and permit requirements. The following units have been deleted (in letter 464C-BSS-4845 sent on November 12, 1999) and should not be referenced:

Unit Number	Construction Permit Number
CC-598-02	0396-014
CC-598-03	0396-014
MB-598-01	0396-022
OV-598-03	0396-022
OV-598-04	0396-022
OV-598-05	0396-022
SB-598-08	0396-022
SB-598-09	0396-022
Conformal Coating Process	0396-022
Ink Stamping Process	0396-022
Soldering	0396-022

Comments identifying each individual unit that has been deleted, but is listed as an emission unit in this draft operating permit are listed under the appropriate emission unit.

The current list of emission units covered by these permits (provided in letter 464C-BSS-4845 sent on November 12, 1999) is:

Unit Number	Operating Permit EU Number	Construction Permit Number
CC-505-01		0396-014
MB-505-01	EU0140	0396-022
OV-598-01	EU0380	0396-022
OV-598-02	EU0390	0396-022
SB-598-01	EU0060	0396-022

SB-598-02	EU0070	0396-022
SB-598-03	EU0080	0396-022
SB-598-04	EU0090	0396-022
SB-598-05	EU0100	0396-022
SB-599-01	EU0110	0396-022
VD-598-01	EU0370	0396-022

Please list these emission unit numbers for the applicable emission limitations. For example, Permit Condition (EU0060 through EU0110-002) currently reads:

> "***Emission Limitation:***
> The total combined emissions of volatile organic compounds (VOCs) from the following emission units shall be limited to 77.95 tons in any consecutive 12-month period: Secret Coating Booths (SB) 598-01 through SB 598-09 inclusive (EU0060 through EU0100, EU0430), SB 599-01(EU0110), and Ovens (OV) 598-01 through OV 598-05 inclusive (EU0380 through EU0420). Other points include a vapor-degreaser VD-598-01(EU0370), ink stamping process (EU0550), conformal coating process (EU0560), and various soldering processes (EU0570). (Special Condition 1)"

Please change this language to:

> "***Emission Limitation:***
> The total combined emissions of volatile organic compounds (VOCs) from the following emission units shall be limited to 77.95 tons in any consecutive 12-month period: Secret Coating Booths (SB) 598-01 through SB 598-05 inclusive (EU0060 through EU0100, EU0430), SB 599-01(EU0110), and Ovens (OV) 598-01 through OV 598-02 inclusive (EU0380 through EU0390). Other points include a vapor-degreaser VD-598-01(EU0370). (Special Condition 1)"

This change also clarifies that spray booth SB-598-06 and SB-598-07 were not covered by this permit. This is clear in the permit review, though the special permit condition language was not as clear.

We request that the letter referenced above (letter 464C-BSS-4845 sent on November 12, 1999) be incorporated by reference, as the permits were never reissued, but the information provided by the permittee was incorporated.

Construction permits are incorporated by reference. This list of permits seems to include all of the construction permits that have ever been issues to the facility including deleted permits for emission units that no longer exist. The only construction permits currently applicable to the facility are: 0396-014, 0396-022, and 0997-007. Please remove all other permits from the list of permits incorporated by

reference. These other permits can be listed in the Statement of Basis that they are not included in the permit because they are no longer active.

Finally, the Monitoring/Record Keeping requirement for Construction permit 0396-022 should be identified as "Special Condition 2" in order to be consistent with identifying Special Conditions 1 and 3.

Response to Comment #7:

The Permit Condition for the Emission Limitation for Special Condition 1 has been revised to include only emission units which are still in operation at the installation. An explanation has been provided in the Statement of Basis under item 1 in the section "*Construction Permit Revisions*" to explain the changes. Both the Permit Condition and the explanation have been provided below.

> "***Emission Limitation:***
> The total combined emissions of volatile organic compounds (VOCs) from the following emission units shall be limited to 77.95 tons in any consecutive 12-month period: Secret Coating Booths (SB) 598-01 through SB 598-05 inclusive (EU0060 through EU0100, EU0120), SB 599-01(EU0110), and Ovens (OV) 598-01 through OV 598-02 inclusive (EU0380 through EU0390). Other points include a vapor-degreaser VD-598-01(EU0370). (Special Condition 1)"
>
> "Construction Permit #0396-022
> The original construction permit was written to include the Mixing Paint Booth (EU0130), the Drying Rack (EU0400), Ovens OV-598-03 through OV-598-05, the ink stamping process (EU0550), the conformal coating process (EU0560), and various soldering process (EU0570) in Special Condition 1. All of these emission units have been removed from the installation and are no longer subject to this Construction Permit. Boeing informed the Air Pollution Control Program about the removal of these emission units in a letter dated November 12, 1999. On February 8, 2000, the Air Pollution Control Program sent a response letter indicating that Construction Permit #0396-022 would not be modified. However, the letter further states that the revisions to remove these units will be completed in the Operating Permit renewal. This amendment letter was labeled as Construction Permit #0396-022A. All references to these units have been removed from the Operating Permit and Special Condition 1 has been revised to reflect all units that are still in use at the installation. If the installation chooses to re-install any of these units, the installation would be required to obtain a new Construction Permit and submit for an Operating Permit Modification.
>
> Special Condition 1 from Construction Permit #0396-022 states that the permit should apply to all Secret Coating Booths SB598-01 through SB598-09 inclusive. This range would then include the Spray Booths

labeled as SB598-06 (EU0140) and SB598-07. However, under the Applicable Requirements section of Construction Permit #0396-022, it is stated that the spray booths to which the construction permit applies to are SB598-01 through SB598-05, SB598-08, SB598-09, and SB599-01. Since SB598-06 and SB598-07 are not among this list, Construction Permit #0396-022 is not applicable to these emission units."

The agency's response to the letter (464C-BSS-4845) will be incorporated by reference as "Construction Permit Amendment #0396-022A." The letter 464C-BSS-4845 sent by Bret Spoerle of the McDonnell Douglas Corporation, a wholly subsidiary of The Boeing Company on November 12, 1999 has been included as a reference document in the statement of basis, but has not been incorporated by reference. The explanation concerning Construction Permit #0396-014 is included under the response to Comment #116.

The agency will remove the construction permits that were incorporated by reference only for Construction Permits where the emission units no longer exist. If there are any emission units that still exist and have applicable Construction Permits, those Construction Permits must still be incorporated by reference, even if the emission units are not being operated. If the emission units have not been removed and the potential exists that the unit could be restarted, then the Construction Permit can not be removed. If the unit has been completely removed and there is no potential that the unit could be restarted, the agency does not have any problem with listing the permit as a reference document in the Statement of Basis. The Construction Permits shall remain in the Operating Permit as "Documents Incorporated by Reference" until the installation gives notice to the agency indicating which emission units have been removed.

The "Monitoring/Record Keeping" requirement for Construction Permit #0396-022 has been identified as "Special Condition 2" in the Permit Conditions.

Comment #8
10 CSR 10 –6.260 (4) Footnote clarification

Each time 10 CSR 10-6.260 is listed a footnote states that 10 CSR 10-6.260(4) is state-only. The operating permit does not identify which part of the listed requirements come from that section of the rule. Please use the nomenclature of the permit to identify the state only provisions, or identify the section of the permit that is from section (4) of the rule in each location that this rule is listed.

Response to Comment#8:

The section of the rule that is from section (4) of 10 CSR 10-6.260 was previously not included in the operating permit conditions. The following sentence has been included in every permit condition for 10 CSR 10-6.260 under the Emission Limitation section. "No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding

those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(4)]"

Comment #9
Operating Permit Format

It would be easier to reference provisions in the permit if the provisions had a number or letter to reference instead of bullets. (i.e.: PW001 three bullets under Emission Limitation instead of 1, 2, and 3 or A, B, and C)

Response to Comment #9:

As requested, the permit conditions will be reformatted to provide a number or letter reference instead of bullets.

Comment #10:
Facility Legal Name and Address

The legal name of this facility is "McDonnell Douglas Corporation, a wholly-owned subsidiary of The Boeing Company."

Please change the name of the installation on the cover page to "McDonnell Douglas Corporations a wholly-owned subsidiary of The Boeing Company" and the parent company to "The Boeing Company."

Please either use the full legal name in the permit, or reference an abbreviation on the cover page for the legal name. For example "McDonnell Douglas Corporation, a wholly-owned subsidiary of The Boeing Company (hereafter "Boeing")."

Please add our mailing address. The personnel responsible for environmental issues, such as Title V permitting are not located at either the installation address or the parent company address listed in the permit. Another address with our mailing address would insure correspondence is handled efficiently.

Response to Comment #10:

The following has been inserted for the Installation and Parent Company's Name and Addresses.

Installation Name and Address
McDonnell Douglas Corporation, a wholly-owned subsidiary
of The Boeing Company (hereafter "Boeing")McDonnell Douglas Corporation, a wholly-owned subsidiary
of The Boeing Company (hereafter "Boeing")McDonnell Douglas Corporation, a wholly-owned subsidiary
of The Boeing Company (hereafter "Boeing")
P.O. Box 516 MC S221-1400P.O. Box 516 MC S221-1400P.O. Box 516 MC S221-1400
St. Louis, MO 63166-0516St. Louis, MO 63166-0516St. Louis, MO 63166-0516
St. CharlesSt. CharlesSt. Charles County

Parent Company's Name and Address
The Boeing CompanyThe Boeing CompanyThe Boeing Company
P.O. Box 3707 MS 7A-XEP.O. Box 3707 MS 7A-XEP.O. Box 3707 MS 7A-XE
Seattle, WA 98124-2207Seattle, WA 98124-2207Seattle, WA 98124-2207

II. Specific Comments to Draft Permit Conditions

Comment #11
Inclusion of Wood Furniture Manufacturing NESHAP

Boeing is an incidental wood furniture manufacturer under 40 CFR Part 63 Subpart JJ National Emission Standards for Wood Furniture Manufacturing Operations requirements. The following language is proposed to be added to the permit:

> *Permit Condition PW004*
> 40 CFR Part 63 Subpart JJ National Emission Standards for Wood Furniture Manufacturing Operations
>
> **Emission Limitation:**
>
> The permittee shall use no more than 100 gallons per month, on a 12-month rolling average, of finishing material or adhesives in the manufacture of wood furniture or wood furniture components.
>
> **Monitoring/Record Keeping:**
>
> The permittee shall maintain purchase or usage records demonstrating that the source uses no more than 100 gallons per month, on a 12-month rolling average, of finishing material or adhesives in the manufacture of wood furniture or wood furniture components.
>
> **Reporting:**
>
> No additional reporting requirements exist except as provided in Section IV (relating to Title V Core Permit Requirements) and Section V (relating to Title V General Permit Requirements).

Response to Comment #11:

Since the installation is an incidental wood manufacture which uses less than 100 gallons of finishing material or adhesives per month, the only applicable rule from Subpart JJ is §63.800(a). The emission limitation and explanation from the Statement of Basis are included below.

Permit Condition PW005

10 CSR 10-6.075
Maximum Achievable Control Technology Regulations
40 CFR Part 63, Subpart GG
National Emission Standards for Hazardous Air Pollutants for Wood Furniture Manufacturing Operations
40 CFR Part 63, Subpart A
General Provisions

Emission Limitation:

- The permittee shall maintain purchase or usage records demonstrating the source meets the definition of incidental wood manufacturing of 40 CFR Part 63, Subpart JJ, but the source shall not be subject to any other provisions of this subpart. (§63.800 (a))
- The permittee shall not use more than 100 gallons per month of finishing material or adhesives in the manufacture of wood furniture or wood furniture components.

Monitoring/Record Keeping:

The permittee shall maintain purchase or usage records demonstrating that the source uses no more than 100 gallons per month of finishing material or adhesives in the manufacture of wood furniture or wood furniture components. (§63.800 (a))

Reporting:

The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation."

"40 CFR Part 63, Subpart JJ- *National Emission Standards for Hazardous Air Pollutants for Wood Furniture Manufacturing Operations*

The installation is defined as being an incidental wood manufacturer. An incidental wood manufacture is a major source that is primarily engaged in the manufacture of products other than wood furniture or wood furniture components and that uses no more than 100 gallons per month of finishing material or adhesives in the manufacture of wood furniture or wood furniture components. The only applicable requirement from 40 CFR Part 63, Subpart JJ is §63.800(a)."

Comment #12
Page 10, Condition PW001

With respect to the third bullet of the Emission Limitation section, Boeing recommends that the language be modified to clarify that the Director is charged with determining non-compliance. Boeing recommends the following language, which tracks the language of the underlying regulation:

"Should the director determine that noncompliance with the Emission Limitation has occurred, the director may require reasonable control measures, as may be necessary."

Emission Limitation section, which specifies the corrective action requirements of the facility when non-compliance is identified. Boeing recommends a monthly monitoring frequency, with provision for weekly observations upon observation of visible fugitive particulate matter emissions beyond the fence line. The following language is proposed:

> ***Monitoring:***
> - Observations of visible fugitive particulate matter emissions from the facility must be made once per month. If monthly observations identify visible fugitive particulate matter emissions from the facility in the ambient air beyond the facility property line, weekly observations shall be conducted until weekly observations identify no visible fugitive particulate matter emission from the facility in the ambient air beyond the facility property line.

With respect to the Recordkeeping section, Boeing requests that recordkeeping be limited to recording of monitoring results (i.e., whether visible fugitive particulate matter was observed beyond the property line or not) and completion of corrective actions required by the director. As proposed in the draft permit, Boeing would be required to maintain records of any visible air emission that go beyond the property line, regardless of whether it involves visible fugitive particulate matter. Such records are unnecessary and do not aid compliance assurance for the facility. In addition, the proposed language requires records of any equipment "malfunctions that could cause an exceedance." Given the complexity of the facility's operations, a multitude of equipment malfunctions would potentially be subject to this requirement regardless of whether an exceedance in fact occurred. Such a recordkeeping requirement would place an undue burden on the facility, and would not provide any measurable improvement in compliance assurance at the facility. Finally, the requirement to characterize each visible emission as "normal" or not serves no legitimate purpose (presumably, any non-compliant emissions should not be considered "normal"). Accordingly, Boeing proposes the following Recordkeeping provision:

> ***Record Keeping:***
> Permittee shall record:
> - The date and time of each observation required by the Monitoring section above.
> - For each observation, whether visible fugitive particulate matter emissions from the facility were observed in the ambient air beyond the facility property line;.
> - Any corrective actions required by the director in accordance with the Emission Limitation above.

Response to Comment #12:

After reviewing 10 CSR 10-6.170, the APCP concurs with the installation's assessment that the language for the third bullet in the Emission Limitation section should be revised to better represent the initial intent of the regulation. The following

wording has been inserted into the third bullet of the Emission Limitation section of permit condition PW001, "Should the director determine that noncompliance with the Emission Limitation has occurred, the director may require reasonable control measures as may be necessary."
In regards to monitoring, the APCP does not agree with the installation about the deletion of the sentence that specifies corrective action to eliminate violations. The previously discussed provisions in the Emission Limitation section only states that the Director could possibly require further control measures. It would be up to the Director's discretion to determine if further action is necessary for any violation (non-compliance). However, if the Director is not in the position to require any further control measures and it would then be the installation's responsibility to take action to be in compliance with 10 CSR 10-6.170. The sentence is necessary so the installation is aware that the responsibility to correct any violation (non-compliance) and prevent it in the future is necessary whether or not the Director determines that further control measures are needed.
With regards to the monitoring frequency, the APCP does agree with the installation's suggestion that the monitoring frequency should start with monthly observations if the installation is currently on that step from the previous permit. The statement of basis has been modified to address the monitoring frequency starting point from the previous permit. The following schedule has been kept in the Operating Permit under the Monitoring section of PW001.

> The following monitoring schedule must be maintained:
> - Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance. Should no violation of this regulation be observed during this period then-
> - Observations must be made once every two weeks for a period of eight (8) weeks. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
> - Observations must be made once per month. If a violation is noted, monitoring reverts to weekly.

The APCP does not agree with the installation's assessment of the Record Keeping section of PW001. The emission limitation portion of the permit condition applies to fugitive particulate matter, therefore the monitoring and record keeping provisions to demonstrate compliance with the limit also only deal with fugitive particulate matter. It was never intended for the installation to be required to record any visible air emissions that go beyond the property line. The only air contaminant regulated and monitored, due to this regulation (10 CSR 10-6.170), is fugitive particulate matter. The wording under the Record Keeping section of PW001 has been revised so that it clearly states that visible particulate matter emissions must be monitored. The inserted wording is below.

> "A log must bemaintained noting the following:
> - Whether fugitive particulate matter air emissions (except water vapor) remain visible in the ambient air beyond the property line of

origin.

- Whether the visible particulate matter air emissions were normal for the installation.
- Equipment malfunctions that cause an exceedance of 10 CSR 10-6.170.
- Any violations of 10 CSR 10-6.170 and any corrective actions undertaken to correct the violation."

The APCP understands the complexity of the installation and that a multitude of equipment would be subject to the requirement that records should be kept of any equipment "malfunctions that could cause an exceedance." The wording has been revised (see above) that records should be kept for equipment malfunctions which cause an exceedance of 10 CSR 10-6.170. The requirement to characterize the visible emissions as "normal" does serve a legitimate purpose. The installation is correct in assuming that any non-compliant emissions would not be classified as "normal". However, it could occur that the visible particulate matter emission may not be beyond the property boundary (this would be in compliance with 10 CSR 10-6.170) but still not be normal for the installation. The "normal" check is necessary so that the installation is not only checking to see if the emission are beyond the boundaries, but also consistent with the day to day levels that are normally associated with the operating schedule. Inconsistency with the day to day levels would be a potential indicator of an equipment malfunction.
In addition, the Reporting provisions have also been modified to incorporate the above changes to the following:

"The permittee shall report to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation."

Comment #13
Page 11, Permit Condition PW002, Emission Limitation

For the St. Louis Metropolitan Area the "Exception" limit should be 40% instead of 60%, but also should include a second exception as follows:

> Existing sources in the St. Louis metropolitan area that are not incinerators and emit less than twenty-five (25) lbs/hr of particulate matter shall be limited to forty percent (40%) opacity.

Please add the following exemptions listed in the rule:

> (A) Internal combustion engines operated outside the St. Louis metropolitan areas and stationary internal combustion engines operated in the St. Louis metropolitan areas;
> (B) Wood burning stoves or fireplaces used for heating;

(C) Fires used for recreational or ceremonial purposes or fires used for the noncommercial preparation of food by barbecuing;
(D) Fires used solely for the purpose of fire-fighter training;
(G) Truck dumping of nonmetallic minerals into any screening operation, feed hopper or crusher;
(H) Emission sources regulated by 40 CFR part 60 and 10 CSR 10-6.070;
(I) Any open burning that is exempt from applicable open burning rules 10 CSR 10-2.100, 10 CSR 10-3.030, 10 CSR 10-4.090 and 10 CSR 10-5.070; and"

Response to Comment #13:

The requested changes have been made. A revised "Emission Limitation" section is included below.

"Emission Limitation:

The permittee shall not discharge into the ambient air from any single existing source of emission whatsoever any air contaminant of an opacity greater than 20%.
Existing sources in the St. Louis metropolitan area that are not incinerators and emit less than twenty-five (25) lbs/hr of particulate matter shall be limited to forty percent (40%) opacity.
Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any sixty (60) minutes air contaminants with an opacity up to 40%.

In regards to the exceptions, please refer to Response to Comment #6 from the April 14, 2003, comment letter. The exceptions will be handled in a similar manner as the exemptions.

Comment #14
Page 11, Condition PW002, Monitoring

Provisions imply that every time the permit is issued, monitoring will revert to weekly. Boeing-St. Charles has been issued a permit and is on a monthly inspection schedule. It seems arbitrary to require the facility to revert to weekly monitoring every time the permit is reissued, even if there have been no exceedances.

This new draft permit changes the monitoring requirement. Currently we do "visible emissions inspections" monthly. If the inspectors observe any visible emissions a Method 9 opacity reading is performed.

This new draft permit proposes periodic Method 22 monitoring. If the person performing the monitoring perceives, or believes any emissions are above the limits, then a Method 9 is to be performed.

Boeing objects to this change. Method 22 does not determine an opacity level. It is used to determine the frequency or length of time emissions are visible and is not intended for the type of units that will be monitored at Boeing's St. Charles facility.

See 1.0 and 2.0 of Method 22 (excerpted in Appendix).

The length of time emissions are visible can not be used to determine what the opacity is. Therefore, this test is not appropriate to determine the opacity from units at the facility. In addition, the proposed language requires training in how to take the readings, but no training on what the opacity scale is, or how to determine what the opacity is once a visible emission is observed, but a Method 9 test is only required if they perceive or believe the emissions to exceed a limit that they are not required to have experience with.

Also, the Method 22 test requires testing over a length of time (6 minutes) and requires periodic rest periods. This is overly burdensome for a facility such as Boeing, where units are spread across large areas and reading would be required at many different locations. In addition, while 6 minutes must be used to perform a Method 9 test it does not have any relevance to a true visible emissions inspection. Spending 6 consecutive minutes observing an area of the facility every month does not provide more assurance of compliance than taking the time to observe the same area of the facility and see if there are any visible emissions once per month. See 11.0 of Method 22 (excerpted in Appendix).

The current requirements of Permit OP1999052 provide a better assurance of compliance and allow the facility to perform the inspections more efficiently. As currently written all regulated visible emissions will receive a Method 9 test, but for areas that have no visible emissions, unnecessary time will not be spent.

Please clarify by changing the wording as follows:

Monitoring:

- The permittee shall conduct opacity readings on a plantwide basis. At a minimum the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit is operating and when the weather conditions allow. If no visible or other significant emissions are observed, then no further observations are required. For emission units with visible emissions, a source representative would then conduct a Method 9 observation using a certified Method 9 observer.

The following monitoring schedule must be maintained:

- Observations must be made once per month. If an exceedance is noted, monitoring reverts to --
  - Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks. Should no exceedance of this regulation be observed

during this period then-

- Observations must be made once every two weeks for a period of eight (8) weeks. If an exceedance is noted, monitoring reverts to weekly. Should no exceedance of this regulation be observed during this period then observations revert to monthly.

Response to Comment #14:

In regards to the first statement in the comment, "Provisions imply that every time the permit is issued, monitoring will revert to weekly.", the APCP does not agree with Boeing's interpretation of the permit condition. The APCP believes the monitoring frequency can be carried forward from operating permit to operating permit as long as the frequency between the permits are consistent and no violations have occurred which would increase the frequency of observations. However, to address Boeing's concerns, the following wording has been included in the permit condition and in the Statement of Basis.

"Weekly observations shall be conducted for a minimum of eight (8) consecutive weeks after permit issuance. Please note: The monitoring frequency shall commence from the initial operating permit monitoring frequency unless an exceedance has been observed. Should no violation of this regulation be observed during this period then-"

"10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*
The installation was already following a Monitoring schedule from the OP1999-052. The installation is currently on the step requiring monthly observations from the previous permit. The installation shall continue the monitoring schedule from the previous Operating Permit, which would require monthly observations. However, if any exceedance of this regulation should occur, the installation would be required to revert to new schedule that is contained in the revised Operating Permit."

In regards to the periodic monitoring, the monitoring methodology and frequency is consistent with other Part 70 operating permits issued by the APCP. The monitoring methodology and frequency is based on the April 18, 1997, Region VII Policy on Periodic Monitoring for Opacity. It is correct that Method 22 does not determine an opacity level, however the procedures in Method 22 are similar to the procedures of Method 9, which is used to measure opacity. The Method 22 observations are a qualitative observation rather than a quantitative observation (Method 9). One of the major differences between the two test methods is that a certified reader is not required for Method 22, unlike Method 9.
It is true that Method 9 observations would provide an opacity level, however requiring daily Method 9 observations on all emission units could create a hardship for some installations. The intent of the Method 22-like observations are for the installation to be able to take a relative quick look at the installation during normal operations and determine if a potential problem exists with opacity observations. If an installation finds a potential problem with the Method 22-like observation, the

installation can follow-up the Method 22-like observation with a Method 9 observation using a certified observer. This allows installations a little more flexibility in determining compliance with the opacity observations. Therefore, the monitoring will not be modified as requested.

Comment #15
Page 11, Condition PW002, Record Keeping

Keeping records of all equipment malfunctions for the entire plant is overly burdensome for a large facility. These records do not help to assure compliance with this regulation and, therefore, should not be put into the operating permit.

Requiring the permittee to document if the visible emissions were normal is unnecessary. This does not help to assure compliance with this regulation and, therefore, should not be put into the operating permit.

Please change the wording as follows

Record Keeping:

- The permittee shall maintain records of all observation results, noting:

1. Whether any air emissions (except for water vapor) were visible from the emission units, and
2. All emission units from which visible emissions occurred.

- The permittee shall maintain records of any USEPA Method 9 opacity test performed in accordance with this permit condition.

Response to Comment #15:

The APCP understands the concern that a multitude of equipment would be subject to the requirement that records should be kept of any equipment "malfunctions that could cause an exceedance." However, the APCP disagrees with the majority of the comment. The requirements to keep records of equipment malfunctions are necessary and provide information to assure compliance with this regulation. These records provide information to the Air Pollution Control Program Enforcement Section, Missouri Department of Natural Resources Inspectors, and the installation on the equipment that contributed to or caused the exceedance of 10 CSR 10-6.220. Maintaining records on malfunctions which cause an opacity exceedance assists an installation in identifying causes of exceedances and establishing methodologies to prevent the malfunction or exceedance in the future. Therefore, the wording under the Record Keeping section of PW002 has been modified from "The permittee shall maintain records of any equipment malfunctions," to "The permittee shall maintain records of any equipment malfunctions that causes an exceedance of this regulation."

The "normal" check is necessary so that the installation is checking that the air emissions are consistent with the day to day levels that are normally associated with the operating schedule. Inconsistency with the day to day levels would be a potential

indicator of an equipment malfunction. Therefore, the "normal" check will remain in the record keeping provisions.

Comment #16
Page 11, Permit Condition PW003, Emission Limitation

Boeing cannot control what other people in the St. Louis metropolitan area do. Please change the phrase "No person shall supply…" to "The permittee shall not supply…".

Response to Comment #16:

As requested, the wording has been changed from "No person shall supply…" to "The permittee shall not supply…"

Comment #17
Page 12, Condition PW003, Monitoring & Recordkeeping

There is no requirement to monitor (especially not daily) nor mention of application rate in 10 CSR 10-5.450. Please reword the monitoring and recordkeeping conditions as follows

Monitoring/Record Keeping

The permittee shall maintain records of the VOC content of traffic coatings used for a minimum of five (5) years. Material Safety Data Sheets (MSDS) or purchasing records showing the VOC content of the traffic coatings used will be kept. These records shall be made available to the Air Pollution Control Division immediately upon request.

Response to Comment #17:

As a result of the comment, the following wording has been incorporated into the draft operating permit under the Monitoring and Record Keeping sections for Permit Condition PW003.

"Monitoring:

The permittee shall determine the composition of the coatings by formulation data supplied by the manufacturer of the coating or from data determined by an analysis of each coating, as received, by EPA Reference Method 24.

Record Keeping:

- Records shall be retained for a minimum of five years.
- Material Safety Data Sheets (MSDS), purchasing records or data analysis showing the VOC content of the traffic coatings used will be kept.
- These records shall be made available to the Air Pollution Control Program, immediately upon request."

Comment #18
Page 12, Condition PW003, Reporting

The reporting condition refers to opacity.

Response to Comment #18:

The following wording has replaced the reporting condition for Permit Condition PW003.

> ***"Reporting:***
> The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which causes an exceedance of this regulation."

Comment #19
Page 12, Unit EU0010

With respect to the emission unit description, please change the description to Various Hand Application Processes. This emission unit encompasses various activities that occur throughout the facility, including but not limited to cleaning/hand wipe activities, flush cleaning, and specialty coating applications (such as sealants and adhesives).

With respect to the permit condition, Boeing has given consideration to MDNR and EPA's suggestion to streamline the applicable requirements of the Aerospace NESHAP and the Missouri Aerospace RACT rule. With respect to building fugitives, there appears to be great overlap between the two requirements, with the notable exception of the application of specialty coatings such as adhesives and sealants on the shop floor. Boeing believes that the NESHAP and RACT provisions for fugitive emissions can be streamlined, so long as the specialty coating requirements are clearly called out, and proposes the following streamlined provision. Boeing would anticipate that the proposed language below will be further revised to reflect the comments provided in Boeing's letter 464C-5371-AYP, dated February 20, 2003.

EU0010 Various Hand Application Processes

General Description:	Various Hand Application Processes
Manufacturer/Model #:	N/A
EIQ Reference # (2001):	EP#BF-STC-03

Permit Condition EU0010-001

10 CSR 10-6.075
Maximum Achievable Control Technology Regulations
40 CFR Part 63, Subpart GG
National Emission Standards for Aerospace Manufacturing and Rework Facilities
40 CFR Part 63, Subpart A
General Provisions
10 CSR 10-5.295
Control of Emissions from Aerospace Manufacturing and Rework Facilities

Emission Limitation:

A. Housekeeping Measures - The permittee shall comply with the following requirements:
   1. Place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers upon completing their use. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton-tipped swabs used for very small cleaning are exempt from this requirement.
   2. Store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers.
   3. Conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers, and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills.

B. Hand-wipe cleaning - The Permittee shall comply with the following requirements:
   1. The permittee shall use cleaning solvents that meet one of the following requirements:
      a. Meet (1) one of the composition requirements in Table 1 of §63.744.
      b. Have a composite vapor pressure of 45-mm Hg (24.1 in. H_2O) or less at 20° Celsius. (68° Fahrenheit).
      c. Demonstrate that the volume of hand-wipe cleaning solvents used in affected cleaning operations has been reduced by at least 60% from a baseline adjusted for production. The baseline shall be established as part of an approved alternative plan administered by the State.
   2. The following cleaning operations are exempt from this permit condition:
      a. Cleaning during the manufacture, assembly, installation, maintenance, or testing of components of breathing oxygen systems that are exposed to the breathing oxygen;
      b. Cleaning during the manufacture, assembly, installation, maintenance or testing of parts, subassemblies, or assemblies that are exposed to strong oxidizers or reducers (e.g., nitrogen tetroxide, liquid oxygen, hydrazine, etc.);
      c. Cleaning and surface activation prior to adhesive bonding;
      d. Cleaning of electronic parts and assemblies containing electronic parts;
      e. Cleaning of aircraft and ground support equipment fluid systems that are exposed to the fluid, including air-to air heat exchangers and hydraulic fluid systems;
      f. Cleaning of fuel cells, fuel tanks, and confined spaces;
      g. Surface cleaning of solar cells, coated optics, and thermal control surfaces;
      h. Cleaning during fabrication, assembly, installation, and maintenance of upholstery, curtains, carpet, and other textile materials used in the interior of the aircraft;
      i. Cleaning of metallic and non-metallic materials used in honeycomb cores

l. Cleaning operations, using nonflammable liquids, conducted within five (5) feet of energized electrical systems. Energized electrical systems means AC or DC electrical circuit on an assembled aircraft once electrical power is connected, including interior passenger and cargo areas, wheel wells and tail sections.

m. Cleaning operations identified as essential uses under the Montreal Protocol for which the Administrator has allocated essential use allowances or exemptions in 40 CFR 82.4

C. Specialty Coating Application - The permittee shall comply with the following requirements:

1. Specialty coatings, as defined in 10CSR10-5.295(2)(A), applied to aerospace vehicles or components shall not exceed the VOC content limits listed in Table 1, of 10 CSR 10-5.295, expressed in pounds per gallon of coating, excluding water and exempt solvent.
2. The emission limitation for specialty coatings shall be achieved by:
   a. The application of low solvent coating technology where each and every coating meets the specified applicable limitation expressed in pounds of VOC per gallon of coating, excluding water and exempt solvents, stated in subsection of 10 CSR 10-5.295 (3)(A);
   b. The application of low solvent coating technology where the monthly volume-weighted average VOC content of each specified coating type meets the specified applicable limitation expressed in pounds of VOC per gallon of coating, excluding water and exempt solvents, stated in subsection (3)(A) of 10 CSR 10-5.295; averaging is not allowed for specialty coatings, and averaging is not allowed between primers, topcoats (including self-priming topcoats), Type I milling maskants, and Type II milling maskants or any combination of the above coating categories; or
   c. Control equipment, including but not limited to incineration, carbon absorption and condensation, with a capture system approved by the director, provided that the owner or operator demonstrates, in accordance with subsection (5)(C), that the control system has a VOC reduction efficiency of eighty-one (81%) or greater.

D. Flush Cleaning - For each aerospace manufacturing and/or rework operation that includes a flush cleaning operation, permittee shall empty the used cleaning solvents each time aerospace parts or assemblies, or components of a coating unit with the exception of spray guns are flush cleaned into an enclosed container or collection system that is kept closed when not in use or into a system with equivalent emission control approved by the director. Aqueous, semi-aqueous, and low vapor pressure hydrocarbon based solvent materials are exempt form the requirements of this subsection.

E. Cleaning Operations - Each cleaning operation subject to this subpart shall be considered in noncompliance if the permittee fails to institute and carry out the housekeeping measures required under this permit condition. Incidental emissions resulting from the activation of pressure release vents and valves on enclosed cleaning systems are exempt from this paragraph.

F. Hand-wipe cleaning - An affected hand-wipe cleaning operation shall be considered in compliance when all hand-wipe cleaning solvents, excluding those used for hand cleaning of spray gun equipment under Permit Condition EU0030, meet either the composition requirements specified in this permit condition or the vapor pressure requirement specified in this permit condition.

Monitoring:

- Compliance with the hand-wipe cleaning solvent composition requirements shall be demonstrated using data supplied by the manufacturer of the cleaning solvent. The data shall identify all components of the cleaning solvent and shall demonstrate that one of the approved composition definitions is met.
- The composite vapor pressure of hand-wipe cleaning solvents used in a cleaning operation subject to this permit condition shall be determined as follows:
  1. For single-component hand-wipe cleaning solvents, the vapor pressure shall be determined using MSDS or other manufacturer's data, standard engineering reference texts, or other equivalent methods.
  2. The composite vapor pressure of a blended hand-wipe solvent shall be determined by quantifying the amount of each organic compound in the blend using manufacturer's supplied data or a gas chromatographic analysis in accordance with ASTM E 260-91 and by calculating the composite vapor pressure of the solvent by summing the partial pressures of each component. The vapor pressure of each component shall be determined using manufacturer's data, standard engineering reference texts, or other equivalent methods. The following equation shall be used to determine the composite vapor pressure:

<< OLE Object: Microsoft Equation 3.0 >>

Where:

W_i = Weight of the ''i''th VOC compound, grams.

W_w = Weight of water, grams.

W_e = Weight of non-HAP, nonVOC compound, grams.

MW_i = Molecular weight of the ''i''th VOC compound, g/g-mole.

MW_w = Molecular weight of water, g/g-mole.

MW_e = Molecular weight of exempt compound, g/g-mole.

PP_c = VOC composite partial pressure at 20 °C, mm Hg.

VP_i = Vapor pressure of the ''i''th VOC compound at 20 °C, mm Hg.(§63.750(b))

Record Keeping:

- The permittee shall fulfill all recordkeeping requirements in §63.10 (a), (b), (d), and (f).
- The permittee shall record the information specified below:
  1. The name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for affected cleaning operations at the facility.
  2. For each cleaning solvent used in hand-wipe cleaning operations that complies with the composition requirements in this permit condition or for semi-aqueous cleaning solvents used for flush cleaning operations:

a. The name of each cleaning solvent used;
b. All data and calculations that demonstrate that the cleaning solvent complies with one of the composition requirements; and
c. Annual records of the volume of each solvent used, as determined from facility purchase records or usage records.

- For each cleaning solvent used in hand-wipe cleaning operations that does not comply with the composition requirements in this permit condition, but does comply with the vapor pressure requirement in this permit condition:
  1. The name of each cleaning solvent used;
  2. The composite vapor pressure of each cleaning solvent used;
  3. All vapor pressure test results, if appropriate, data, and calculations used to determine the composite vapor pressure of each cleaning solvent; and
  4. The amount (in gallons) of each cleaning solvent used each month at each operation.
- For each cleaning solvent used for exempt hand-wipe cleaning operations specified in this permit condition that does not conform to the vapor pressure or composition requirements of this permit condition:
  1. The identity and amount (in gallons) of each cleaning solvent used each month at each operation; and
  2. A list of the processes set forth in this permit condition to which the cleaning operation applies.

10 CSR 10-5.295 (4)(B)(1) coating records requirement and 10 CSR 10-5.295 (4)(B)(2)(A) aqueous/semi-aqueous requirements

Reporting:

- Except with respect to the application of specialty coatings, the permittee shall submit the following information:
  1. Semiannual reports occurring every six (6) months from the date of the notification of compliance status that identify:
     a. Any instance where a non-compliant cleaning solvent is used for a nonexempt hand-wipe cleaning operation;
     b. A list of any new cleaning solvents used for hand-wipe cleaning in the previous six (6) months and, as appropriate, their composite vapor pressure or notification that they comply with the composition requirements specified in §63.744(b)(1);
     c. If the operations have been in compliance for the semiannual period, a statement that the cleaning operations have been in compliance with the applicable standards. Sources shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements.

Response to Comment #19:

The emission unit description has been changed to Various Hand Application Processes. Since the Specialty Coatings are not Hand-wipe cleaning, as the Various Hand Applications, they will be separated out from this Permit Condition. The Specialty Coatings will be under Emission Unit EU0590, "Adhesives and Sealants." 40 CFR Part 63, Subpart GG will not apply to EU0590, since the coatings are not either primer or topcoat and while they are applied by hand, it is not considered Hand-wipe cleaning. The only rule that will be applied to EU0590 will be 10 CSR

10-5.295.

With respect to the permit condition EU0010, the APCP agrees with the suggestion to streamline the applicable requirements of the Aerospace NESHAP and the Missouri Aerospace RACT rule.

"EU0590
Adhesives and Sealant

General Description:	Adhesives and Sealant
Manufacturer/Model #:	N/A
EIQ Reference # (2001):	None

Permit Condition EU0590-001

10 CSR 10-5.295
Control of Emissions from Aerospace Manufacturing and Rework Facilities

Emission Limitation:

1. The permittee shall not cause, permit, or allow the emissions of volatile organic compounds (VOC) from the coating of aerospace vehicles or components to exceed:

a. 2.9 pounds per gallon (350 grams per liter) of coating, excluding water and exempt solvents, delivered to a coating applicator that applies primers. For general aviation rework facilities, the VOC limitation shall be 4.5 pounds per gallon of coating, excluding water and exempt solvents, delivered to a coating applicator that applies to primers;

b. 3.5 pounds per gallon (420 grams per liter) of coating, excluding water and exempt solvents, delivered to a coating applicator that applies topcoats (including self-priming topcoats). For general aviation rework facilities, the VOC limit shall be 4.5 pounds per gallon (540 grams per liter) of coating, excluding water and exempt solvents, delivered to a coating applicator that applies topcoats (including self-priming topcoats);

c. The VOC content limits listed in Appendix A (Table 1 of 10 CSR 10-5.295), expressed in pounds per gallon of coating, excluding water and exempt solvent, delivered to a coating applicator that applies specialty coatings;

Operational Limitation:

1. The emission limitation in Emission Limitation 1. a. through c. shall be achieved by:

a. The application of low solvent coating technology where each and every coating meets the specified applicable limitation expressed in pounds of VOC per gallon of coating, excluding water and exempt solvents, stated in subsection of Emission Limitation 1.a. through 1.c.;

b. The application of low solvent coating technology where the monthly volume-weighted average VOC content of each specified coating type

meets the specified applicable limitation expressed in pounds of VOC per gallon of coating , excluding water and exempt solvents, stated in Emission Limitation 1.a. through 1.c.; averaging is not allowed for specialty coatings, and averaging is not allowed between primers, topcoats (including self-priming topcoats), Type I milling maskants, and Type II milling maskants or any combination of the above coating categories; or

c. Control equipment, including but not limited to incineration, carbon absorption and condensation, with a capture system approved by the director, provided that the permittee demonstrates, in accordance with the *Testing* section, that the control system has a VOC reduction efficiency of eighty-one (81%) or greater.

Testing:

If the permittee elects to demonstrate compliance with 10 CSR 10-5.295 by use of control equipment meeting the requirements of Operational Limitation c. 3., shall demonstrate the required capture efficiency in accordance with EPA Methods 18, 25, and/or 25A in 40 CFR 60, Appendix A.

Monitoring/Record Keeping:

- Each owner or operator of an aerospace manufacture and/or rework operation that applies coatings -

1. Maintain a current list of coating in use with category and VOC content as applied;
2. Record each coating volume usage on a monthly basis; and
3. Maintain records of monthly volume-weighted average VOC content for each coating type included in averaging for coating operations that achieve compliance through coating averaging under paragraph (3)(B)2. of this rule.

- All records must be kept on-site for a period of five (5) years and made available to the department upon request.

Reporting:

The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation."

In regards to the exemptions, please refer to Response to Comment #6 of the April 14, 2003, comment letter.

Comment #20
Page 12-13, Permit Condition EU0010-001, Emission Limitation

Boeing reiterates the comments in its letter 464C-5371-AYP dated February 20, 2003 to MDNR that the permit should define ambiguous terms to aid clarity and compliance with the permit condition. In particular, Boeing requested that the permit

condition include definitions of "closed" and "completion of use" for purposes of this emission limitation. While Boeing stands by its comments in its letter 464C-5371-AYP dated February 20, 2003, Boeing proposes at a minimum that the following provisions be added to the Emission Limitation section to clarify the meaning of these terms:

"The use of a cloth, paper or other absorbent applicator used for cleaning will not be considered to be completed until the end of the shift during which such applicator was in use. The failure to place all applicators in use during a shift into closed containers at the end of the shift is a deviation of this emission limitation."

"Squirt bottles and flip top containers with small openings are closed containers for purposes of this permit condition."

Response to Comment #20:

Please refer to Response to Comment #2 from the February 20, 2003, comment letter.

Comment #21

Page 15, Condition EU0010-001, Recordkeeping

Random monthly inspections are not required by 40 CFR Part 63, Subpart GG. Boeing would prefer to continue the programmatic approach as described in Boeing letter 464C-5371-AYP dated February 20, 2003 to MDNR, but have received no response from MDNR with regard to this topic. In light of the absence of information, please delete the following bullet.

- Records of the random monthly inspections will be maintained.

Response to Comment #21:

Please refer to Response to Comment #2 from the February 20, 2003, comment letter.

Comment #22

Page 15, Condition EU0020 through EU0030

Boeing appreciates MDNR's efforts to streamline the permit, but due to the differing regulatory requirements, Cold Cleaners and Spray Gun Cleaners should be separated. 40 CFR Part 63, Subpart GG does not apply to cold cleaners. Also, all of our cold cleaners (with one exception addressed separately) are aqueous.

Response to Comment #22:

The Cold Cleaners and Spray Gun Cleaners were grouped together based on the previous operating permit, OP1999-052, which had both emission units subject to the 40 CFR Part 63, Subpart GG. Based on discussion with the installation, the two emission units have been separated. For Cold Cleaners, the agency and installation has agreed that 10 CSR 10-5.300, *Control of Emissions from Solvent Metal Cleaning*, applies. For Spray Gun Cleaners, both 40 CFR Part 63, Subpart GG and 10 CSR 10-5.300 apply.

Comment #23
Page 15, Condition EU0030-002

Boeing notes that these spray gun cleaners are covered by both the Aerospace NESHAP and the Aerospace RACT rule. As discussed above, Boeing has given consideration to MDNR and EPA's suggestion to streamline the applicable requirements of the Aerospace NESHAP and the Missouri Aerospace RACT rule. Since there appears to be great overlap between the requirements for spray gun cleaners, Boeing believes that the NESHAP and RACT provisions can be streamlined along the lines proposed for Building Fugitive Activities, EU0010.

Response to Comment #23

The APCP agrees that in an effort to help streamline the requirements, the requirements from the NESHAP and RACT can be combined into one permit condition.

Comment #24
Page 19, Permit Condition (EU-0060 through EU0110)-002

As discussed previously, Boeing has given consideration to MDNR and EPA's suggestion to streamline the applicable requirements of the Aerospace NESHAP and the Missouri Aerospace RACT rule. With respect to coatings operations, there appears to be great overlap between the two requirements, with the notable exception of the application of specialty coatings. Boeing believes that the NESHAP and RACT provisions for coating operations can be streamlined, so long as the specialty coating requirements are clearly called out, and proposes that the permit conditions for Aerospace NESHAP and Aerospace RACT requirements be streamlined into one provision along the lines proposed for Building Fugitive Activities and Spray Gun Cleaning. Boeing would anticipate that the streamlined language would also reflect the comments provided in Boeing's letter 464C-5371-AYP, dated February 20, 2003. In addition, Boeing has additional specific comments to the proposed language which are presented below.

Response to Comment #24:

The APCP agrees that in an effort to help streamline the requirements, the requirements from the NESHAP and RACT can be combined into one permit condition.

Comment #25
Page 19, Permit Condition (EU-0060 through EU0110)-002, Emission Limitation

The paragraph starting "*Compliance Methods*" is not worded correctly. Please reword "...the following methods either in by themselves or in conjuction..." to "...the following methods either by themselves or in conjuction..."

Response to Comment #25

As requested, the typographical error "in" that was located before the phrase "by themselves..." has been deleted.

Comment #26
Page 19, Condition EU0060 through EU0110-002, Emission Limitations

Boeing does not have a control system and does not anticipate the need to use a control system in the future. Therefore, Boeing recommends deletion of the following bullet.

- *Controlled coatings – control system requirements.* Each control system shall reduce the operation's organic HAP and VOC emissions to the atmosphere by 81% or greater, taking into account capture and destruction or removal efficiencies, as determined using the procedures in §63.750(h) when a control device other than a carbon absorber is used. (§63.745(d))

Response to Comment #26

A control system is defined in 40 CFR Part 63, Subpart GG as a combination of pollutant capture system(s) and control device(s) used to reduce discharge to the atmosphere of organic HAP or VOC emissions generated by a regulated operation. The emission units are equipped with fabric filters that are control devices. The fabric filters are only used for the removal of particulate matter and inorganic HAP material. The fabric filters are not set up as a capture system that would be defined as a control system. The HAP emissions that are captured by the control devices are inorganic HAPs, which are not required to have a control system that reduces emissions to the atmosphere. 40 CFR Part 63, Subpart GG only requires that a required 81% reduction of emissions to the atmosphere from organic HAPs and VOC which are controlled by a control system. The organic HAPs and VOC emissions are uncontrolled and not subject to either a control device or control system. Therefore, the installation does not have a control system and would not be subject to the requirements under §63.745(d).

As requested, the control system requirements of §63.745(d) have been removed from the permit condition. In addition, the previous paragraph has been included in the Statement of Basis as reasoning as to why the control system requirements are not part of the permit condition.

Comment #27
Page 19, Permit Condition (EU-0060 through EU0110)-002, Emission Limitation

The sections following the paragraph starting "*Compliance Methods*" are formatted such that it is unclear which of them are under that section and which are new sections.

Response to Comment #27

The section labeled "*Compliance Methods*" has been reformatted to ensure that the reader is able to determine which conditions fall under which sections. The APCP apologizes for any misunderstanding that the old formatting may have created. Please see the new permit condition which is located in Attachment A of this

memorandum.

Comment #28
Page 19, Permit Condition (EU-0060 through EU0110)-002, Emission Limitation

There is an excess bullet prior to the "Inorganic HAPs-" section.

Response to Comment #28:

As requested, the extra bullet has been removed from the permit condition.

Comment #29
Page 19, Condition EU0060 through EU0110-002, Emission Limitations

Delete the following:

> The primer application is considered in compliance when the conditions specified in paragraphs (1) to (2) below are met. Failure to meet any one of the conditions indentified in these paragraphs shall constitute noncompliance. (§63.749(d)(3))
> (1) The overall control sytem efficiency, Ek, as determined using the procedure specified in §63.750(h) for control systems with control systems other than carbon absorbers, is equal to or greater than 81% during initial performance test and any subsequent performance test; (§63.749(d)(3)(ii)(A))
> (2) Operates all application techniques in accordance with the manufacture's specificaitons or locally prepared operating procedures, whichever is more stringent. (§63.749(d)(3)(iv))
>
> The topcoat application operation is considered in compliance when the conditions specified in paragraphs (1) through (2) are met. Failure to meet any of the conditions identified in these paragraphs shall constitute noncompliance. (§63.749(d)(4))
> (1) The overall control system efficiency, Ek, as determined using the procedures specified in §63.750(h) for control systems with control devices other than carbon absorbers, is equal to or greater than 81% during initial performance test and any subsequent performance test; (§63.749(d)(4)(ii))
> (2) Operates all application techniques in accordance with the manufacture's specificaitons or locally prepared operating procedures, whichever is more stringent. (§63.749(d)(4)(iv))

And insert the following

> The primer application is considered in compliance when the conditions specified in paragraphs (1) through (3) below are met. Failure to meet any one of the conditions indentified in these paragraphs shall constitute

noncompliance. (§63.749(d)(3))

(1) All values of H(i) and H(a) (as determined using the procedures specified in §63.750(c) and (d)) are less than or equal to 350 grams of organic HAP per liter (2.9 lb/gal) of primer (less water) as applied, and all values of G(i) and G(a) (as determined using the procedures specified in §63.750(e) and (f)) are less than or equal to 350 grams of organic VOC per liter (2.9 lb/gal) of primer (less water and exempt solvents) as applied.

(2) Uses an application technique specified in §63.745(f)(1)(i) through (f)(1)(ix).

(3) Operates all application techniques in accordance with the manufacturer's specifications or locally prepared operating procedures, whichever is more stringent.

The topcoat application operation is considered in compliance when the conditions specified in paragraphs (1) through (3) are met. Failure to meet any of the conditions identified in these paragraphs shall constitute noncompliance. (§63.749(d)(4))

(1) All values of H(i) and H(a) (as determined using the procedures specified in § 63.750(c) and (d)) are less than or equal to 420 grams organic HAP per liter (3.5 lb/gal) of topcoat (less water) as applied, and all values of G(i) and G(a) (as determined using the procedures specified in § 63.750(e) and (f)) are less than or equal to 420 grams organic VOC per liter (3.5 lb/gal) of topcoat (less water and exempt solvents) as applied.

(2) Uses an application technique specified in §63.745(f)(1)(i) through (f)(1)(ix).

(3) Operates all application techniques in accordance with the manufacturer's specifications or locally prepared operating procedures.

Response to Comment #29

As requested, the changes identified above have been made and the revised conditions for the primers and topcoats are listed below.

"

b. The primer application is considered in compliance when the conditions specified in paragraphs (1) through (3) below are met. Failure to meet any one of the conditions indentified in these paragraphs shall constitute noncompliance. (§63.749(d)(3))

(1) All values of H(i) and H(a) (as determined using the procedures specified in §63.750(c) and (d)) are less than or equal to 350 grams of organic HAP per liter (2.9 lb/gal) of primer (less water) as applied, and all values of G(i) and G(a) (as determined using the procedures specified in §63.750(e) and (f)) are less than or equal to 350 grams of organic VOC per liter (2.9 lb/gal) of primer (less water and exempt solvents) as applied. (§63.749(d)(3)(i))

(2) (a)Uses an application technique specified in §63.745(f)(1)(i) through (f)(1)(viii); or (§63.749(d)(3)(iii)(A))

(b) Uses an alternative application technique, as allowed under §63.745(f)(1)(ix), such that the emissions of both organic HAP and VOC for the implementation period of the alternative application method are less than or equal to the emissions generated using HVLP or electrostatic spray

application methods ad determined using the procedures specified in §63.750(i). (§63.749(d)(4)(iii)(B))

(3) Operates all application techniques in accordance with the manufacture's specificaitons or locally prepared operating procedures, whichever is more stringent. (§63.749(d)(3)(iv))

c. The topcoat application operation is considered in compliance when the conditions specified in paragraphs (1) through (2) are met. Failure to meet any of the conditions identified in these paragraphs shall constitute noncompliance. (§63.749(d)(4))

(1) All values of H(i) and H(a) (as determined using the procedures specified in § 63.750(c) and (d)) are less than or equal to 420 grams organic HAP per liter (3.5 lb/gal) of topcoat (less water) as applied, and all values of G(i) and G(a) (as determined using the procedures specified in § 63.750(e) and (f)) are less than or equal to 420 grams organic VOC per liter (3.5 lb/gal) of topcoat (less water and exempt solvents) as applied. (§63.749(d)(4)(i))

(2) (a) Uses an application technique specified in §63.745(f)(1)(i) through (f)(1)(viii);or (§63.749(d)(4)(iii)(A))

(b) Uses an alternative application technique, as allowed under §63.745(f)(1)(ix), such that the emissions of both organic HAP and VOC for the implementation period of the alternative application method are less than or equal to the emissions generated using HVLP or electrostatic spray application methods ad determined using the procedures specified in §63.750(i). (§63.749(d)(4)(iii)(B))

(3) Operates all application techniques in accordance with the manufacture's specificaitons or locally prepared operating procedures, whichever is more stringent. (§63.749(d)(4)(iv))"

Comment #30

Page 20, Condition EU0060 through EU0110-002, Emission Limitations

Remove requirements that do not apply and add additional applicable regulatory language. In addition, Boeing has identified painting operations where it is not technically feasible to paint the parts in a booth. Delete the following:

> 3. If the pressure drop across the dry particulate filter system, as recorded pursuant to §63.752(d)(1), is outside the limit(s) specified by the filter manufacture or in locally prepared operating procedures, shut down the operation immediately and take corrective action. If the water path in the waterwash system fails the visual continuity/flow characteristics check, or the water flow rate recorded pursuant to §63.752(d)(2) exceeds the limit(s) specified by the booth manufacture or in locally prepared operating procedures, or the booth manufacture's or locally prepared maintenance procedures for the filter or waterwash system have not been performed as scheduled, shut down the operation immediately and take corrective action. The operation shall not be resumed until the pressure drop or water flow rate is returned within specified limits(s). (§63.745(g)(3))

Replace with:

3. If the pressure drop across the dry particulate filter system, as recorded pursuant to § 63.752(d)(1), is outside the limit(s) specified by the filter manufacturer or in locally prepared operating procedures, shut down the operation immediately and take corrective action. The operation shall not be resumed until the pressure drop is returned within the specified limit(s).
4. The requirements of paragraphs §63.745 (g)(1) through (g)(3) of this section do not apply to the following:
(a) Touch-up of scratched surfaces or damaged paint;
(b) Hole daubing for fasteners;
(c) Touch-up of trimmed edges;
(d) Coating prior to joining dissimilar metal components;
(e) Stencil operations performed by brush or air brush;
(f) Section joining;
(g) Touch-up of bushings and other similar parts;
(h) Sealant detackifying;
(i) Painting parts in an area identified in a title V permit, where the permitting authority has determined that it is not technically feasible to paint the parts in a booth as follows
(i) The part is too large to be painted in a booth.
(ii) The coatings are not spray applied.
(iii) The part would need to be removed from a fixture/tool to be painted in a booth.
(iv) Cycle time restrictions prior to subsequent operations make it time prohibitive to move the part to a paint booth.
(v) Other operations where engineering analysis recommends the part be painted outside of a booth.
(vi) Painting of joint areas, sealant areas, or small standards parts including but not limited to bushings, fasteners, nuts, shims, and spacers that is incidental to the application of the coating and is required to achieve complete coverage.
(j) The use of hand-held spray can application methods.

Response to Comment #30

Since the installation does not utilize a waterwash system, the requirements regarding the waterwash system have been removed from the permit. The sentence, "If the booth manufacture's or locally prepared maintenance procedures for the filter have not been performed as scheduled, shut down the operation immediately and take corrective action," will remain in the permit condition. Please see Attachment A for the revised wording.

In regards to the applicability of paragraphs §63.745 (g)(1) through (g)(3), please refer to Response to Comment #6 from the March 14, 2003, comment letter. The applicability of paragraphs §63.745 (g)(1) through (g)(3) will be handled in a similar manner as the exemptions.

Comment #31
Page 21, Condition EU0060 through EU0110-002, Operational Limitation

Please correct the following typographical errors

Under 1.(vi) delete the "1" prior to the word "Electrodeposition"

In 2. add a "r" after the "e" in the word "manufacture's"

Response to Comment #31
As requested, the typographical errors have been corrected.

Comment #32
Page 21, Condition EU0060 through EU0110-002, Operational Limitation

The exemptions listed in §63.745(f)(3) need to be added to this section of the permit.

Response to Comment #32
Please refer to Response to Comment #6 from the April 14, 2003, comment letter. The exemptions listed in §63.745(f)(3) will be handled in a similar manner.

Comment #33
Page 21, Condition EU0060 through EU0110-002, Monitoring

Please correct the following typographical errors

Delete the "e" at the end of the word "pursuante".

Add an "r" at the end of the word "manufacture"

Response to Comment #33
As requested, the typographical errors have been corrected.

Condition #34
Pages 22-23, Condition EU0060 through EU0110-002

MDNR has proposed to include in the Monitoring and Recordkeeping sections of this permit condition specific pressure drop ranges for purposes of determining compliance with the emission limitation. Boeing reiterates its objection to inclusion of the pressure drop ranges for each booth (See email from Bret Spoerle to Amish Daftari dated 3/10/03), and urges that MDNR modify the permit condition to reflect only the language of the underlying requirement, which requires only that the facility utilize certified filters and operate within the limits specified by the filter manufacturer. Since filters are routinely replaced, the Boeing facilities consume large numbers of filters during regular operations. In order to remain competitive and responsive to changes in the market, Boeing must retain maximum flexibility to switch filter suppliers, either due to technical or economic considerations. Since the acceptable pressure drop range is specific to each type of filter supplied by various

filter manufacturers, inclusion of a specific pressure drop range in the permit will constrain Boeing's ability to utilize alternate suppliers or filters. Any change in filter could require a change in the permitted pressure drop range, which would be considered a significant permit modification. For this reason, the pressure drop ranges should not be placed in the Title V permit.

The last bulleted item in the Monitoring section states that the pressure drop should be monitored while primer or topcoat applications are occurring. As stated in § 63.745(g), pressure drop monitoring is only required for application primers and topcoats that contain Inorganic HAP. Therefore, please clarify that monitoring is required only for primer or topcoat application operations in which inorganic HAP containing coatings are spray applied.

In the Recordkeeping section, Boeing notes the following typographical errors:

> Under "Primers and Topcoats" in 2. insert the word "as" in front of the word "applied".
>
> Under Inorganic HAP Control in 1. add the phrase "complying with 63.745(g)" after the word "emissions".
>
> Under Inorganic HAP Control delete 2. because this facility does not use water wash booths.

Also, in the Reporting section, Boeing noted the following typographical error:

> Replace the word "conet" with "content"

Finally, since the facility has no waterwash booths, please delete the following:

> All times when a primer or topcoat application was not immediately shut down when the pressure drop across a dry particulate filter or HEPA filter system, the water flow rate through a conventional waterwash system was outside the (§63.753(c)(1)(i))limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures.

And replace with:

> All times when a primer or topcoat application was not immediately shut down when the pressure drop across a dry particulate filter or HEPA filter system was outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures.

Response to Comment #34

The APCP notes Boeing's objection to the inclusion of the pressure drop ranges in

the actual Permit Condition. Please note: Boeing and the APCP were encouraged to include additional recommended permit revisions in the December 3, 2002, re-opening for cause letter from EPA Region VII received on December 9, 2002. The inclusion of numerical pressure drop ranges identified in this comment, were one of the recommended permit revisions from EPA Region VII.

The APCP understands Boeing's concerns with regards to filter replacements and the APCP has no intention in constraining Boeing regarding the selection of filters. However, after listening to both positions, the APCP agrees with EPA Region VII that the requirements of 40 CFR Part 63, Subpart GG, require the installation to establish an acceptable pressure drop ranges to satisfy an efficiency rating, include the acceptable pressure drop range on a record keeping log and monitor the pressure drop values. Please refer to the rule references in Response to Comment #3 from the February 20, 2003, comment letter.

According to § 63.745(g)(2)(i)(A) and (g)(2)(ii)(A),

> "Before exhausting it to the atmosphere, pass the air stream through a dry particulate filter system certified using the methods described in § 63.750(o) to meet or exceed the efficiency data points in Tables 1 and 2 of this section (Tables 3 and 4 for §63.745 (g)(2)(ii)(A)); or"

According to § 63.750(o),

> "Dry particulate filters used to comply with § 63.745(g)(2) or § 63.746(b)(4) must be certified by the filter manufacturer or distributor, paint/depainting booth supplier, and/or the facility owner or operator using method 319 in appendix A of subpart A of this part, to meet or exceed the efficiency data points found in Tables 1 and 2, or 3 and 4 of § 63.745 for existing or new sources respectively."

Therefore, the inclusion of the acceptable pressure drop range which is being monitored against should be included in the operating permit as an operational limitation to demonstrate compliance with the requirements of 40 CFR Part 63, Subpart GG for the inorganic HAP emissions.

As requested, the typographical errors have been corrected in the revised wording.

The references to the waterwash system have been removed from the Record Keeping section and the Reporting section of this Permit Condition. Please see Attachment A for the revised permit condition.

Comment #35

Page 23, Permit Condition (EU0060 through EU0110)-003, Emission Limitation

Boeing requests that the permit not include the actual calculated limits for the allowable emission rate of these units. These emission rates are based on tables in the regulation.

Note that the regulation has two limits. The facility must meet one of the two. The table and equations should be referenced in the permit, since exceeding either one of

those is not noncompliance, unless the other is also exceeded.

Response to Comment #35:

As requested, The operating permit condition has been modified to remove the actual calculated limits and include the equations and tables listed in 10 CSR 10-6.400(3)(A)1. and (3)(A)2. In addition, the following operating permit condition also includes the provisions of 10 CSR 10-6.400 (3)(A)4. Please note: The actual calculated limits are still in the Statement of Basis to fulfill the requirement to show that these units are in compliance with the emission limit.

"Emission Limitation:

1. The permittee shall not cause, suffer, allow or permit the emission of particulate matter in any one (1) hour from Emission Units EU0060 through EU0130 each in excess of the amount calculated using one of the following equations selected based on the applicable process weight rate:
   For process weight rates of 60,000 pounds per hour (lb/hr) or less:
   $E = 4.10P^{0.67}$
   For process weight rates greater than 60,000 lb/hr:
   $E = 55.0P^{0.11} - 40$;
   Where: E = rate of emission in lb/hr; and
   P = process weight rate in tons per hour; or
2. The limitations established by Emission Limitation 1 shall not require the reduction of particulate matter concentration, based on the source gas volume, below the concentration specified in 10 CSR 10-6.400 (3)(A)2, Table I, for that volume; provided that, for the purposes of this section, the person responsible for the emission may elect to substitute a volume determined according to the provisions of 10 CSR 10-6.400 (3)(A)3. provided further that the burden of showing the source gas volume or other volume substituted, including all the factors which determine volume and the methods of determining and computing the volume shall be on the person seeking to comply with the provisions of this section.
3. The concentration of particulate matter in the exhaust gases shall not exceed 0.30 gr/scf. Notwithstanding the provisions of Emission Limitation 1 and 2, above, the permittee shall not allow or permit emission of particulate matter in excess of 0.30 grains per standard cubic foot of exhaust gas."

Comment #36

Page 23, Condition EU0060 through EU0110-003, Monitoring and Record Keeping

Based on calculations in the Statement of Basis EU0060, EU0070, and EU0080 meet their limits without control. In addition, these booths are required to meet stringent 40 CFR Part 63 Subpart GG filter requirements.

These inspections will cause the painters to spend significant additional time prior to painting each shift. In order to inspect all of the filters for "holes, imperfections, proper installation or other problems" the painters will have to move or remove the first stage filters, climb and move ladders, and then inspect each of the filters, which

may have multiple pockets or folds to be examined. These inspections will be another opportunity for the filters to be damaged.

The Monitoring requirements arbitrarily imposed by DNR are unnecessary and overly burdensome. Under the Monitoring delete

Monitoring:

- The spray booth equipped with fabric filter shall not be operated without a fabric filter in place.
- Fabric filters shall be inspected for holes, imperfections, proper installation or other problems that could hinder the effectiveness of the filter.
- The filters shall be inspected each shift before spraying begins in a booth and after installation of a new filter.
- The manufacturer's recommendations shall be followed with regard to installation and frequency of replacement of the filters.

Record Keeping:

- The permittee shall maintain records of the inspections of fabric filters when they occur.
- All inspections, corrective actions, and instrument calibrations shall be recorded.

And replace with:

"Monitoring/Record Keeping:

- The one-time compliance demonstration is listed in the Statement of Basis.

Response to Comment #36:

The APCP disagrees with Boeing's assessment of the Monitoring and Record keeping provisions as well as the calculations in the statement of basis. According to the statement of basis calculations for EU0060, EU0070 and EU0080, the controlled and uncontrolled emission rates demonstrate compliance. The controlled emission rates are dependent on a 90% control efficiency of the fabric filter and a 65% transfer efficiency of the paint spray to the part. The uncontrolled emission rate calculations contain a transfer efficiency variable that is assumed to be constant. The uncontrolled emission rates for EU0060 with the transfer efficiency included indicates an emission rate of 0.05 gr/scf. The uncontrolled emission rates for EU0070 and EU0080 with the transfer efficiency included indicate an emission rate of 0.032 gr/scf. The limits according to 10 CSR 10-6.400(3)(A)2. for EU0060 are 0.059 gr/scf and for EU0070 and EU0080 are 0.051 gr/scf If the transfer efficiency decreased to 50%, the uncontrolled emission rate would be greater than the limit. With the transfer efficiency as well as the control efficiency of the fabric filters needed to demonstrate compliance, the operating permit is required to include some type of monitoring of the control device to demonstrate compliance.
The APCP does agree that the inorganic HAP monitoring/record keeping of permit conditions (EU0060 through EU0130)-002 would be sufficient monitoring of the control

device to demonstrate compliance with the emission limitations of permit conditions (EU0060 through EU0130)-003. Therefore, the following has been inserted in the Monitoring and Record Keeping sections of Permit Condition (EU0060 through EU0130)-003.

> ***"Monitoring:***
> - The permittee shall operate the fabric filters according to the Monitoring conditions of Permit Condition (EU0060 through EU0130)-002.
>
> ***Record Keeping:***
> - The Record Keeping requirements for the fabric filters from Permit Condition (EU0060 through EU0130)-002 will fulfill the Record Keeping requirements of this permit condition."

The following has been inserted into the Statement of Basis as an explanation for the Monitoring and Record Keeping requirements that are now in this Permit Condition.

> "10 CSR 10-6.400, *Restriction of Particulate Matter from Industrial Processes*
>
> For the installation to be able to demonstrate compliance with the emission limitations for EU0060-EU0130, the installation must conduct monitoring of the control device. The Inorganic HAP Monitoring and Record Keeping requirements for Permit Condition (EU0060 through EU0130)-002 contain control device monitoring of the pressure drop from 40 CFR Part 63, Subpart GG. Therefore, the emission units will utilize the monitoring/record keeping requirements from EU0060-EU0130-002 for the monitoring of the control device.

Comment #37

Page 24, Condition (EU0060 through EU0110)-004, Emission Limitation

The second bulleted section refers to "10 CSR 10-5.295 (3)(A)", "subsection (3)(A) of 10 CSR 10-5.295", and "subsection (5)(C)". These portions of the rule are not identified in the permit. Please add references to the section as it appears in the permit, or identify the regulatory citation for each provision listed in the permit (something similar to what was done for the Aerospace NESHAP), so that it is clear exactly what requirements are being referenced.

Response to Comment #37:

As requested, the references to the "10 CSR 10-5.295 (3)(A)" and "subsection (3)(A) of 10 CSR 10-5.295" have been replaced with "Emission Limitation 1.a. through 1.c." This is a reference to the exact condition within the permit condition. The phrase "subsection (5)(c)" has been replaced with "with the *Testing* section." The regulation from (5)(c) has been included under a section labeled "*Testing.*" The new wording has been included below.

"The emission limitation in Emission Limitation 1. a. through c. shall be achieved by:

1. The application of low solvent coating technology where each and every coating meets the specified applicable limitation expressed in pounds of VOC per gallon of coating, excluding water and exempt solvents, stated in subsection of Emission Limitation 1.a. through 1.c.;
2. The application of low solvent coating technology where the monthly volume-weighted average VOC content of each specified coating type meets the specified applicable limitation expressed in pounds of VOC per gallon of coating , excluding water and exempt solvents, stated in Emission Limitation 1.a. through 1.c.; averaging is not allowed for specialty coatings, and averaging is not allowed between primers, topcoats (including self-priming topcoats), Type I milling maskants, and Type II milling maskants or any combination of the above coating categories; or
3. Control equipment, including but not limited to incineration, carbon absorption and condensation, with a capture system approved by the director, provided that the permittee demonstrates, in accordance with the *Testing* section, that the control system has a VOC reduction efficiency of eighty-one (81%) or greater.

Testing:

If the permittee elects to demonstrate compliance with 10 CSR 10-5.295 by use of control equipment meeting the requirements of Operational Limitation c. 3., shall demonstrate the required capture efficiency in accordance with EPA Methods 18, 25, and/or 25A in 40 CFR 60, Appendix A."

Comment #38
Page 24 & 25, Condition EU0060 through EU0110-004, Emission Limitations

First bullet, 1., last sentence remove "to" in the phrase "coating applicator that applies to primers".

Second bullet references Emission Limitation 1(a), but there is no Emission Limitation 1(a).

Response to Comment #38:

As requested, for the First bullet, 1., the language has been revised to match the language that is contained under 40 CFR Part 63, Subpart GG. This is the language that was contained under the original draft permit condition for (EU0060 through EU0110)-002.

As requested, the Second bullet has been revised and included as an Operational Limitation. The revised wording (which includes a reference to the exact Emission Limitation) is included in the Response to Comment #37.

Comment #39

Page 24 & 25, Condition EU0060 through EU0110-004, Emission Limitations

The "Housekeeping procedures", "Hand-wipe cleaning", "Spray gun cleaning", and "Flush cleaning" sections should be included in the appropriate facility-wide emission units (EU0010 and EU0030) and not in these emission units. Please remove these provisions from this emission unit.

Response to Comment #39

As requested, the sections have been removed from the revised wording since these sections are not applicable to these emission units. The "Housekeeping procedures", "Hand-wipe cleaning", "Spray gun cleaning", and "Flush cleaning" are applicable to emission units EU0010 and EU0030. 10 CSR 10-5.295 has also be combined with 40 CFR Part 63, Subpart GG. Please see Attachment A for the revised wording.

Comment #40

Page 24 & 25, Condition EU0060 through EU0110-004, Emission Limitations

Please add the following exemptions from 10 CSR 10-5.295(3)(I) to the emission limitations:

"(I) The following activities are exempt from this section:

1. Research and development;

2. Quality control;

3. Laboratory testing activities;

4. Chemical milling;

5. Metal finishing;

6. Electrodeposition except for the electrodeposition of paints;

7. Composites processing except for cleaning and coating of composite parts or components that become part of an aerospace vehicle or component as well as composite tooling that comes in contact with such composite parts or components prior to cure;

8. Electronic parts and assemblies except for cleaning a topcoating of completed assemblies;

9. Manufacture of aircraft transparencies;

10. Wastewater treatment operations;

11. Manufacturing and rework of parts and assemblies not critical to the vehicle's structural integrity or flight performance;

12. Regulated activities associated with space vehicles designed to travel beyond the limit of the earth's atmosphere including but not limited to satellites, space stations, and the space shuttle;

13. Utilization of primers, topcoats, specialty coatings, cleaning solvents, chemical milling maskants, and strippers containing VOC at concentrations less than 0.1 percent for carcinogens or 1 percent for noncarcinogens;

14. Utilization of touchup, aerosol can, and Department Defense classified coatings;

15. Maintenance and rework of antique aerospace vehicle and components; and

16. Rework of aircraft or aircraft components if the holder the Federal Aviation Administration design approval, or the holder's licensee, is not actively manufacturing the aircraft or aircraft components."

Response to Comment #40:

In regards to including exemptions, please refer to Response to Comment # 6 from the April 14, 2003 comment letter. Please note: The regulation states that the activities listed in 10 CSR 10-5.295 (3)(I) are "exempt from this section." The section that these activities are exempted from are 10 CSR 10-5.295 (3).

Comment #41

Page 25, Condition EU0060 through EU0110-004, Monitoring

A monitoring plan is required for (3)(B)3 control equipment. This facility uses compliant coatings instead of control equipment. This facility is not required to have a monitoring plan. Please delete:

> Each owner or operator of an aerospace manufacturing and/or rework operation shall submit a monitoring plan to the director that specifies the applicable operating parameter value, or range of values, to ensure ongoing compliance with paragraph (3)(B)3. of this rule. Any monitoring device, required by the monitoring plan, shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's specifications.

And combine monitoring with the drafted recordkeeping requirements.

Response to Comment #41:

These emission units are equipped with control equipment (fabric filters). However, the fabric filters are only used to control emissions of particulate matter. The

requirement of 10 CSR 10-5.295 (4)(A) is that the permittee should submit a monitoring plan to ensure ongoing compliance with (3)(B)(3) of 10 CSR 10-5.295. The requirement of (3)(B)(3) is that control equipment should have a VOC reduction efficiency of 81% or greater. The control equipment installed by the installation is not utilized for VOC emissions, only particulate emissions. The installation complies with the VOC emission limits of 10 CSR 10-5.295 by the use of compliant coatings. Since the installation does not use control equipment to comply with the VOC limits, the monitoring plan from 10 CSR 10-5.295 (4)(A) is not required. The condition requiring the monitoring plan has been removed from the Monitoring section. If the installation were to ever use control equipment to meet the applicable VOC limits, the installation would be required to submit a monitoring plan, for approval, to the Air Pollution Control Program. This paragraph has been included in the Statement of Basis to explain the reasons why the monitoring plan is not required.

Comment #42
Page 26, Condition EU0060 through EU0110-004, Record Keeping

First bullet 1., add a "s" to the word "coating"

The section refers to "subsection (3)(A)" and "paragraph (3)(B)2." These portions of the rule are not identified in the permit. Please add references to the section as it appears in the permit, or identify the regulatory citation for each provision listed in the permit (something similar to what was done for the Aerospace NESHAP), so that it is clear exactly what requirements are being referenced.

The second bullet relates to cleaning solvents. Please remove this section, as the provisions for cleaning solvents are located under other emission units.

Under the second bullet 1. please change the "g" in semi-agueous to a "q".

Response to Comment #42

As requested, an "s" has been added to the word "coating."

As requested, the reference to "subsection (3)(A)" has been changed to "Emission Limitation 1.a. through 1.c. of this permit condition" while the reference to "paragraph (3)(B)2" has be changed to "Operational Limitation c.2. of this section." The revised wording is as follows:

"3. Each owner or operator of an aerospace manufacture and/or rework operation that applies coatings listed in Emission Limitation 1.a. through 1.c of this permit condition shall-
   a. Maintain a current list of coatings in use with category and VOC content as applied;
   b. Record each coating volume usage on a monthly basis; and
   c. Maintain records of monthly volume-weighted average VOC content for each coating type included in averaging for coating operations that

achieve compliance through coating averaging under Operational Limitation c.2. of this permit condition."

As requested, the portion relating to cleaning solvents has been removed from this permit condition.

The typographical error has not been corrected for this permit condition, since this section relates to cleaning solvents and has been removed from this condition.

Comment #43
Page 26, Condition EU0120 through EU0130

Please delete EU0130 (SB-598-07) because this unit is no longer at the facility.

Response to Comment #43

Since the emission unit is no longer at the installation, the emission unit and resulting permit conditions have been removed from the permit. This unit had been renumbered as EU0150 during the revision process based on the responses to the April 14, 2003,comment letter. The following wording has been inserted in the statement of basis to explain the absence of these emission units.

"12. 10 CSR 10-6.065, *Operating Permits*

On March 14, 2003 the installation indicated to the Air Pollution Control Program that following units, listed in the table below, had been removed from the premises. The units were in the draft Operating Permit and were assigned emission unit numbers, but since these units have been removed, the units have been deleted from the body of the Operating Permit. If the installation chooses in the future to re-install these units, the installation would be required to first submit a Construction Permit application and also submit for an Operating Permit Modification.

Emission Unit ID	Installation ID	EIQ Reference	Emission Unit Name
EU0130	SB-598-08	CL-STC-01	Mixing Touch-UP Paint Booth
EU0150	SB-598-07	CL-STC-01	Bench Spray Booth
EU0160	CS-STC-01A	SC-STC-01	Combustion Source
EU0250	EG-STC-01	None	Emergency Generator
EU0270	EG-509-01	None	Emergency Generator
EU0400	SB-598-09	CL-STC-01	Drying Rack
EU0550	None	None	Ink Stamping Process
EU0560	None	None	Conformal Coating Process
EU0570	None	None	Smoldering Process"

Comment #44
Page 26, Condition EU0120 through EU0130

Please delete entire condition (EU0120 through EU0130)-001 (40 CFR Part 63 Subpart GG) requirements from these sources. These sources have not been used for 40 CFR Part 63 Subpart GG and we do not expect that they will be needed in near future for aerospace parts.

Response to Comment #44:

Since these units are not used for 40 CFR Part63, Subpart GG, the requirements under this condition do not apply to these units. In addition, Emission Unit 0150 (formerly EU0130) has been removed from the installation and operating permit (please refer to Response to Comment #43 from the April 14, 2003 comment letter. If EU0140 (formerly EU0120) is ever used in the future for the 40 CFR Part 63, Subpart GG, the installation would be required to apply for a Significant Operating Permit Modification. An explanation has been provided in the Statement of Basis.

Comment #45
Page 31, Condition (EU0120 through EU0130)-002, Emission Limitation

The second bulleted section refers to "10 CSR 10-5.295 (3)(A)", "subsection (3)(A) of 10 CSR 10-5.295", and "subsection (5)(C)". These portions of the rule are not identified in the permit. Please add references to the section as it appears in the permit, or identify the regulatory citation for each provision listed in the permit (something similar to what was done for the Aerospace NESHAP), so that it is clear exactly what requirements are being referenced.

Response to Comment #45:

Please refer to Response to Comment #37 from the April 14, 2003, comment letter. In addition, please see Attachment B which contains the revised Permit Condition.

Comment #46
Page 31, Condition (EU0120 through EU0130)-002, Emission Limitation

First bullet, 1., last sentence remove "to" in the phrase "coating applicator that applies to primers".

Second bullet references Emission Limitation •1, but there are several Emission Limitation •1 in this section—it is unclear what is being referenced.

Response to Comment #46:

As requested, the first bullet, 1., has been modified and the following revisions have been made to the Emission Limitation portion of this Permit Condition.

"Emission Limitation:

1. The permittee shall not cause, permit, or allow the emissions of volatile organic compounds (VOC) from the coating of aerospace vehicles or components to exceed:

a. 2.9 pounds per gallon (350 grams per liter) of coating, excluding water and exempt solvents, delivered to a coating applicator that applies primers. For general aviation rework facilities, the VOC limitation shall be 4.5 pounds per gallon of coating, excluding water and exempt solvents, delivered to a coating applicator that applies to primers;
b. 3.5 pounds per gallon (420 grams per liter) of coating, excluding water and exempt solvents, delivered to a coating applicator that applies topcoats (including self-priming topcoats). For general aviation rework facilities, the VOC limit shall be 4.5 pounds per gallon (540 grams per liter) of coating, excluding water and exempt solvents, delivered to a coating applicator that applies topcoats (including self-priming topcoats);
c. The VOC content limits listed in Table 1, of 10 CSR 10-5.295, expressed in pounds per gallon of coating, excluding water and exempt solvent, delivered to a coating applicator that applies specialty coatings;"

Comment #47
Page 32 and 33, Condition (EU0120 through EU0130)-002, Emission Limitation

The "Housekeeping procedures", "Hand-wipe cleaning", "Spray gun cleaning", and "Flush cleaning" sections should be included in the appropriate facility-wide emission units (EU0010 and EU0030)and not in these emission units. Please remove these provisions from this emission unit.

Response to Comment #47:

Please refer to Response to Comment #39 from the April 14, 2003, comment letter.

Comment #48
Page 31-33, Condition EU0060 through EU0110-004, Emission Limitations

Please add the following exemptions from 10 CSR 10-5.295(3)(I) to the emission limitations:

"(I) The following activities are exempt from this section:

1. Research and development;

2. Quality control;

3. Laboratory testing activities;

4. Chemical milling;

5. Metal finishing;

6. Electrodeposition except for the electrodeposition of paints;

7. Composites processing except for cleaning and coating of composite parts

or components that become part of an aerospace vehicle or component as well as composite tooling that comes in contact with such composite parts or components prior to cure;

8. Electronic parts and assemblies except for cleaning a topcoating of completed assemblies;

9. Manufacture of aircraft transparencies;

10. Wastewater treatment operations;

11. Manufacturing and rework of parts and assemblies not critical to the vehicle's structural integrity or flight performance;

12. Regulated activities associated with space vehicles designed to travel beyond the limit of the earth's atmosphere including but not limited to satellites, space stations, and the space shuttle;

13. Utilization of primers, topcoats, specialty coatings, cleaning solvents, chemical milling maskants, and strippers containing VOC at concentrations less than 0.1 percent for carcinogens or 1 percent for noncarcinogens;

14. Utilization of touchup, aerosol can, and Department Defense classified coatings;

15. Maintenance and rework of antique aerospace vehicle and components; and

16. Rework of aircraft or aircraft components if the holder the Federal Aviation Administration design approval, or the holder's licensee, is not actively manufacturing the aircraft or aircraft components."

Response to Comment #48:

Please refer to Response to Comment #6 from the April 14, 2003, comment letter.

Comment #49

Page 33, Condition EU0120 through EU0130-002, Monitoring

A monitoring plan is required for (3)(B)3 control equipment. This facility uses compliant coatings instead of control equipment. This facility is not required to have a monitoring plan. Please delete:

Each owner or operator of an aerospace manufacturing and/or rework operation shall submit a monitoring plan to the director that specifies the applicable operating parameter value, or range of values, to ensure ongoing compliance with paragraph (3)(B)3. of this rule. Any monitoring device,

required by the monitoring plan, shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's specifications.

And combine monitoring with the drafted recordkeeping requirements.

Response to Comment #49:

Please refer to Response to Comment #41 from the April 14, 2003, comment letter.

Comment #50

Page 33, Condition EU0120 through EU0130-002, Record Keeping

First bullet 1., add a "s" to the word "coating"

The section refers to "subsection (3)(A)" and "paragraph (3)(B)2." These portions of the rule are not identified in the permit. Please add references to the section as it appears in the permit, or identify the regulatory citation for each provision listed in the permit (something similar to what was done for the Aerospace NESHAP), so that it is clear exactly what requirements are being referenced.

The second bullet relates to cleaning solvents. Please remove this section, as the provisions for cleaning solvents are located under other emission units.

Response to Comment #50:

Please refer to Response to Comment #42 from the April 14, 2003, comment letter..

Comment #51

Page 33, Condition EU0140 through EU0150

Emission Unit SB-598-08 (EU0150) has been removed from the facility as stated in Boeing letter 464C-BSS-4845 dated November 12, 1999.

Emission Unit MB-598-01 (EU0140) was composed of three sections. Two sections were removed from the facility and the remaining one was moved to Building 505 and renamed MB-505-01 as stated in Boeing letter 464C-BSS-4845 dated November 12, 1999.

Response to Comment #51

Please refer to Response to Comment #43 from the April 14, 2003, comment letter, concerning Emission Unit SB-598-08. This emission unit had been renumbered from EU0150 to EU0130 before being removed from the permit.

Emission Unit EU0140 has also been renumbered to EU0130. As requested, the emission unit number has been changed from MB-598-01 to MB-505-01.

Comment #52

Page 33, Emission Unit EU0140

Please move this emission unit to the group of emission units including EU0060

through EU0110. These units all have the same applicable requirements. This will help to streamline the permit.

Response to Comment #52

The APCP agrees with the installation's suggestion of combining these units with emission units EU0060 through EU0110 in an effort to streamline the permit. Emission Unit EU0140 and EU0150 have been renumbered as EU0120 and EU0130, respectively. Subsequently, Emission Units EU0120 and EU0130 have been renumbered as EU0140 and EU0150. All references in the Statement of Basis have also been revised for these four emission units.

Comment #53

Page 42, Emission Unit EU0160

This emission unit has been removed. It no longer exists and should be removed from the permit.

Response to Comment #53:

Please refer to Response to Comment #43 from the April 14, 2003, comment letter.

Comment #54

Page 43, Emission Units EU0170 and EU0180

Construction Permit # 0997-007 covers these two boilers.

Response to Comment #54:

The APCP agrees with the installation that Construction Permit #0997-007 would apply to these two boilers. However, the Construction Permit was previously not included under these units because there are no Special Conditions associated with the Construction Permit. The underlying requirements in the Construction Permit are included as applicable requirements.If theConstruction Permit does not contain Special Conditions, the APCP lets the underlying requirements stand in the Header of the Permit Conditions. Please Note: The APCP has included this Construction Permit as a Document Incorporated by Reference. Therefore, no changes were made to the permit conditions as a result of this comment.

Comment #55

Page 44, Condition (EU0170 through EU0220)-001, Emission Limitation

The limit is incorrectly stated in the units lb/hr. It should be in lb/MMBTU.

Response to Comment #55:

The APCP agrees the limit was incorrectly stated as having units of lb/hr. As requested, the units for the Emission Limitation has been corrected and modified to lb/MMBTU.

Comment #56

Page 44, Condition (EU0170 through EU0220)-001, Emission Limitation

We request that the calculated number not be inserted into the permit. Insignificant activities may be modified/added/removed without any permit modification. However, the facilities overall MHDR may change when these changes are made causing the emission limitation listed in the permit to be incorrect.

Response to Comment #56:

The APCP agrees with the installation concerning the calculated emission limitations and will modify the permit condition to include the equation from 10 CSR 10-5.030 instead of the calculated number. The calculated number will not be in the permit condition, but will remain in the Statement of Basis.

Concerning the addition, removal of modification of insignificant activities, the installation should be cautioned that an addition, removal or modification of equipment will change the input of the equation, the emission limitation and potentially the monitoring and/or record keeping requirements. These changes might require a Construction Permit review and/or an Operating Permit modification depending on the type of change. Therefore, the installation should carefully evaluate the effects of the addition, removal or modification of equipment with regards to the Construction Permit, Operating Permit and requirements of 10 CSR 10-5.030.

Comment #57

Page 44, Condition (EU0170 through EU0220)-001, Monitoring/Record Keeping

Please put the potential emission rate in the Statement of Basis instead of having a separate record keeping requirement. The Statement of Basis is already required to be kept with the Title V permit.

The potential to emit particulates from EU0170 through EU0220 (based on AP-42 emission factors) is:

Natural Gas:

(7.6 #/MMSCF) / (1,020 MMBTU/MMSCF) = **7.451 * 10^-3 lb/MMBTU**

Fuel Oil #2:

(1 #/1000 gals) / (140 MMBTU/1,000 gals) = **7.143 * 10^-3 lb/MMBTU**

These are both less than the limit.

Response to Comment #57:

As requested, the APCP has moved the information contained in Attachment F to the Statement of Basis. The Attachment will now be known as Table 3: Emission Limitation and Potential to Emit Calculation for all Units subject to 10 CSR 10-5.030. Table 3 will be located in Item 1 under the category heading "Other Regulatory Determinations."

The APCP agrees 1020 MMBTU/MMSCF is the average gross heating value of natural gas. However, the APCP has used worst case scenario in determination for the Potential to Emit Calculation. The range for the combustion of natural gas ranges from 950 to 1050 MMBTU/MMSCF. The APCP has used 1050 MMBTU/MMSCF for the worst case scenario. The emission factor for Fuel Oil #2 came from AP-42 and was 2.0 pounds per 1000 gallons. The APCP has, therefore, not made any change to the potential to emit calculation that was contained in the original Attachment F.

The new "Monitoring/Record Keeping" section now states:

"Monitoring/Record Keeping:

- The permittee shall maintain a copy on-site of the Statement of Basis, which contain a potential to emit calculations in terms of pounds of particulate matter per million BTU of heat input for each fuel type burned in this emission unit.
- These records shall be made available immediately to Department of Natural Resources personnel upon request.
- Maintain records for five (5) years."

Comment #58

Page 45, Condition, (EU0170 through EU0220)-002, Monitoring/Record Keeping/Reporting

The notification of a change of fuel type should only be for a fuel other than natural gas or fuel oil no. 2. The permittee has demonstrated compliance with the standard for either of these fuels. There is no reason notification is needed to assure compliance with this rule.

If notification is required, when is it required by?

Response to Comment #58:

The installation is correct in that it is only permitted to natural gas or fuel oil No. 2 and that compliance has been shown for both types of fuel. The new "Monitoring/Record Keeping" section is included below.

"Monitoring/Record Keeping:

- The permittee shall maintain a copy on-site of the Statement of Basis, which contain a potential to emit calculations in terms of pounds of particulate matter per million BTU of heat input for each fuel type burned in this emission unit.
- These records shall be made available immediately to Department of Natural Resources personnel upon request.
- Maintain records for five (5) years."

Comment #59

Page 45, Condition, (EU0170 through EU0220)-002, Monitoring/Record Keeping/Reporting

The language following the third bullet is either excess or incomplete.

Response to Comment #59:

The language following the third bullet was in excess and should not have been included in the permit. The phrase, "Each report shall identify each period during which" has been deleted from the draft permit.

Comment #60

Page 46, EU0230 through EU0240-001,

Please combine EU0230 and EU240 into one emission unit.

Add the following § 63.743(b) requirement to the appropriate section of the permit

> Startup, shutdown, and malfunction plan. Each owner or operator that uses an air pollution control device or equipment to control HAP emissions shall prepare and operate in accordance with a startup, shutdown, and malfunction plan in accordance with § 63.6. Dry particulate filter systems operated per the manufacturer's instructions are exempt from a startup, shutdown, and malfunction plan. A startup, shutdown, and malfunction plan shall be prepared for facilities using locally prepared operating procedures. In addition to the information required in § 63.6, this plan shall also include the following provisions:
>
> (1) The plan shall specify the operation and maintenance criteria for each air pollution control device or equipment and shall include a standardized checklist to document the operation and maintenance of the equipment;
> (2) The plan shall include a systematic procedure for identifying malfunctions and for reporting them immediately to supervisory personnel; and
> (3) The plan shall specify procedures to be followed to ensure that equipment or process malfunctions due to poor maintenance or other preventable conditions do not occur.

Response to Comment #60:

According to the Operating Permit application and the Emission Inventory Questionnaires, the installation labels these two units under two different Emission Unit ID numbers (MC-STC-01 and DP-STC-01). Since the installation differentiates the units separately, the Emission Units will not be combined into on emission unit ID. The agency will add the requested sections from 40 CFR Part 63, Subpart GG.

Comment #61

Page 46, EU0230 through EU0240-001, Emission Limitation/Operation Limitation

Add § 63.746(b)(4) requirements for the Boeing baghouse used in the depainting operation as follows

> Each owner or operator of a new or existing depainting operation complying with § 63.746 (b)(2), that generates airborne inorganic HAP emissions from dry media blasting equipment, shall:
> (a) Perform the depainting operation in an enclosed area, unless a closed-cycle depainting system is used.
> (b) Pass any air stream removed from the enclosed area or closed-cycle depainting system through a dry particulate filter system, certified using the method described in § 63.750(o) to meet or exceed the efficiency data points in Tables 1 and 2 of § 63.745, through a baghouse, or through a waterwash system before exhausting it to the atmosphere.
> (c) Mechanical and hand sanding operations are exempt from the requirements in paragraph (b)(4) of this section.

Delete the fourth and fifth bullet items. These apply to control systems which Boeing does not use.

Response to Comment #61:

Asrequested, the requirements from §63.746(b)(4) have been included in the Permit Condition since the installation does dry media blasting. Since the installation uses a baghouse for control and not a dry particulate system, the requirements from §63.746(b)(4)(iii) for a dry particulate system have not been included in the permit condition. Additionally, the requirements for §63.746(b)(4)(iv) have not been included since the installation does not utilize a water wash system. §63.746(b)(4)(v) deals with the compliance methods for a dry particulate system and a water wash system. Since the installation uses a baghouse, §63.746(b)(4)(v) is not applicable to the installation. Since the installation does not have a control system, the requirements from §63.746(c) are not applicable to the installation. Therefore, the following language has been inserted in the "Emission Limitation" section of Permit Condition (EU0230 through EU0240)-001.

> "4. The permittee complying with Emission Limitation 2, that generates airborne inorganic HAP emissions from dry media blasting equipment, shall also comply with the requirements specified in paragraphs (b)(4)(i) through (b)(4)(v) of this section. (§63.746(b)(4))
>
> i. Perform the depainting operation in an enclosed area, unless a closed-cycle depainting system is used.
>
> ii. (A) For existing sources pass any air stream removed from the enclosed area or closed-cycle depainting system through a dry particulate filter system, certified using the method described in § 63.750(o) to meet or exceed the efficiency data points in Tables 1 and 2 of § 63.745, through a baghouse, or through a waterwash system before exhausting it to the atmosphere. (§63.746(b)(4)(i))
> (B) For new sources pass any air stream removed from the

enclosed area or closed-cycle depainting system through a dry particulate filter system certified by the filter manufacturer using the method described in § 63.750(o) to meet or exceed the efficiency data points in Tables 3 and 4 of § 63.745 or through a baghouse before exhausting it to the atmosphere. (§63.746(b)(4)(ii))

iii. Mechanical and hand sanding operations are exempt from the requirements in Emission Limitation 4. (§63.746(b)(5))"

In addition, an explanation has also been included in the Statement of Basis.

"40 CFR Part 63, Subpart GG- *National Emission Standards for Aerospace Manufacturing and Rework Facilities*

The requirements from §63.746(b)(4) have been included in Permit Condition (EU0230 through EU0240)-001 since the installation does dry media blasting. Since the installation uses a baghouse for control and not a dry particulate system, the requirements from §63.746(b)(4)(iii) for a dry particulate system have not been included in the permit condition. Additionally, the requirements for §63.746(b)(4)(iv) have not been included, since the installation does not utilize a water wash system. §63.746(b)(4)(v) deals with the compliance methods for a dry particulate system and a water wash system. Since the installation uses a baghouse, §63.746(b)(4)(v) is not applicable to the installation. Since the installation does not have a control system, the requirements from §63.746(c) are not applicable to the installation.

The requirements of §63.752(e)(2) are not applicable to the installation since the installation does not have a carbon absorber. Since the installation does not have a control system, the requirements from §63.752(3) are not applicable to the installation. The requirements of §63.752(e)(7) are not applicable to the installation since the regulation is for particulate filters and water wash systems, neither of which is utilized by the installation. Since §63.753(d)(1)(vii) and §63.753(d)(2)(ii) deals with parameters that are consistent with dry particulate filters and water wash systems and since the installation does not use either system, the requirements from this regulation has not been included in the Permit Condition."

Comment #62

Page 48-49 , EU0230 through EU0240-001, Recordkeeping

Delete the second and third bullet. This applies to controls systems and Boeing does not use a control system for depainting.

Delete the seventh bullet (*Inorganic HAP emissions)* because Boeing uses a baghouse for their depainting operation.

Response to Comment #62:

The requirements of §63.752(e)(2) are not applicable to the installation since the installation does not have a carbon absorber. Since the installation does not have a control system, the requirements from §63.752(3) are not applicable to the

installation. The requirements of §63.752(e)(7) are not applicable to the installation since the regulation is for particulate filters and water wash systems, neither of which is utilized by the installation. Therefore, as requested the above regulations contained in the second, third and seventh bullet have been removed from the Permit Condition.

Comment #63
Page 49, EU0230 through EU0240-001, Reporting

First bullet, 7. can be deleted because Boeing uses a baghouse and is not subject to these requirements.

Response to Comment #63:

Since §63.753(d)(1)(vii) deals with parameters that are consistent with dry particulate filters and water wash systems and the installation does not use either system, the requirements from this regulation have been removed from the Permit Condition.

Comment #64
Page 49, EU0230 through EU0240-001, Reporting

There are no pressure drop or water flow rate requirements for this unit. Delete:

- The permittee shall submit annual reports occurring every 12 months from the date of the notification of compliance status that identify: (§63.753(d)(2))

1. The average volume per aircraft of organic HAP-containing chemical strippers or weight of organic HAP used for spot stripping and decal removal operations if it exceeds the limits specified in § 63.746(b)(3); and (§63.753(d)(2)(i))
2. The number of times the pressure drop limit(s) for each filter system or the number of times the water flow rate limit(s) for each waterwash system were outside the limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures. (§63.753(d)(2)(ii))

Replace with

- The permittee shall submit annual reports occurring every 12 months that identify: (§63.753(d)(2))
    1. The average volume per aircraft of organic HAP-containing chemical strippers or weight of organic HAP used for spot stripping and decal removal operations if it exceeds the limits specified in § 63.746(b)(3). (§63.753(d)(2)(i))

Response to Comment #64:

As requested, the above changes have been made to the permit condition.

Comment #65
Page 50, Emission Unit EU0250

Please delete this emission unit. This emission unit does not exist.

Response to Comment #65:

Please refer to Response to Comment #43 from the April 14, 2003, comment letter.

Comment #66

Page 50, Emission Unit EU0270

Please delete this emission unit. It has been removed from the facility.

Response to Comment #65:

Please refer to Response to Comment #43 from the April 14, 2003, comment letter.

Comment #67

Page 51, Emission Units EU0310-EU0320

EIQ Reference number refers to the emission units from the previous section.

Response to Comment #66:

The EIQ Reference has been changed to "EP#None (for EU0310 through EU0350)."

Comment #68

Page 51, Emission units EU0310-EU0320

Please change the description of each unit to Fuel Oil #2/Diesel fired. The permittee considers these fuels to be equivalent. The same requirements apply to the units if either fuel is used.

Response to Comment #68

The description of each unit has been changed to "Fuel Oil #2 Diesel Fired."

Comment #69

Page 52, Condition EU0330

This emission unit only applies to materials generated from operations governed by 40 CFR Part 63, Subpart GG and has no monitoring, recordkeeping, or reporting requirements on it's own. Boeing suggests that the requirements as stated in §63.748 be added to each 40 CFR Part 63, Subpart GG emission unit and that EU0330 be deleted.

Response to Comment #69:

Since the regulations for the materials generated are specific to emission unit governed by 40 CFR Part 63, Subpart GG, the APCP will remove this emission unit and place the requirements from §63.748 and §63.749(i) in each emission unit subject to the 40 CFR Part 63, Subpart GG.

> "Except as provided in §63.741(e), the owner or operator of each facility subject to 40 CFR Part 63, Subpart GG that produces a waste that contains HAP shall conduct the handling and transfer of the waste to or from containers, tanks, vats,

vessels, and piping systems in such a manner that minimizes spills. (§63.748)

For those wastes subject to 40 CFR Part 63, Subpart GG, failure to comply with the requirements specified in §63.748 shall be considered a violation. (§63.749(i))"

Comment #70:
Page 53, Condition EU0340-001, Monitoring and Record Keeping

There is no requirement for a vapor recovery system on this storage tank. None of the monitoring requirements are required by the regulation. The listed monitoring is asking for monitoring of emission limitations that are not listed under emission limitation. In addition, there is a typographical error in the first sentence under the Record Keeping. An, is listed instead of and. Please delete

Monitoring:
The permittee shall monitor the vapor recovery system and the gasoline loading equipment in a manner that prevents:

- Gauge pressure from exceeding 4500 pascals (18 in. of water) in the delivery vessel.
- A reading equal to or greater than 100% of the lower explosive limit (LEL, measured as propane) at 2.5 centimeters from all points on the perimeter of a potential leak source during loading and transfer operations
- Visible liquid leaks during loading or transfer operations.

Record Keeping:
Keep record documenting the number of delivery vessels unloaded an their owners. Also keep records of routine and unscheduled maintenance and repairs and of all results of tests conducted. Records shall be kept for five (5) years and made available upon request.

Replace with

Monitoring/Record Keeping:
Keep records documenting the number of delivery vessels unloaded and their owners. Records shall be kept for five (5) years and made available upon request.

Response to Comment #70:
As requested, modifications have been made to the Monitoring/Record keeping requirements. The following has been placed in the "Monitoring" section of the Permit Condition. The requirements come from 10 CSR 10-5.220 (5)(D).

"Monitoring:
1. The permittee shall keep records documenting the vessel owners and number of delivery vessels unloaded by each owner.
2. Records should be made available to the staff director within five days of request.

3. The permittee shall keep on-site copies of the lading ticket, manifest or delivery receipt for each grade of product received, subject to examination upon request.
4. If a delivery receipt is retained rather than a manifest or loading ticket, the delivery ticket shall bear the following information: vendor name, date of delivery, quantity of each grade, point of origin, and the manifest or loading ticket number. The required retention on-site of the loading ticket, manifest or delivery receipt shall be limited to the four (4) most recent records for each grade of product."

Comment #71
Page 54, Condition EU0360-001, Monitoring

The monitoring and record keeping requirements should be written to where they can be easily understood. The two year record retention conflicts with the five year retention period required in the General Record Keeping and Reporting Requirements (10 CSR 10-6.065(6)(C)1.C). Please change the monitoring and recordkeeping provisions to the following:

Monitoring/Record Keeping:

The permittee shall keep records of the tank dimensions for the life of the tank.

Response to Comment #71:

As requested, the following sentence has been removed from the Permit Condition, "The owner or operator shall keep copies of all records required by this section, except for the record required by paragraph (b) of this section, for at least 2 years." If the installation was required (by Subpart Kb) to maintain records, other than the dimensions of the tank, the installation would have to keep those records for five years to conform with the requirements of 10 CSR 10-6.065 and 40 CFR Part 70.. However, the installation is only required to maintain the dimensions of the tank, and that record should be kept for the life of the tank. Therefore, the Permit Condition has been modified as follows:

"Permit Condition EU0360-001

10 CSR 10-6.070
New Sources Performance Regulations
40 CFR Part 60, Subpart Kb
Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which construction, reconstruction, or modification commenced after July 23, 1984

Emission Limitation:

Except as specified in paragraphs (a) and (b) of §60.116b, vessels either with a capacity greater than or equal to 151 cubic meters storing a liquid with a maximum true vapor pressure less than 3.5 kPa or with a capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure less than 15.0 kPa are exempt from the General Provisions (part 60, subpart A) and from the provisions of this subpart. (§60.110b(c))

Monitoring:
The record required by the Record Keeping requirement (paragraph (b) of §60.110b) will be kept for the life of the source. (§60.116b(a))

Record Keeping:
The owner or operator of each storage vessel as specified in §60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Each sotrage vessel with a design capacity less the 75 cubic meters is subject to no provision of this subpart other than those required by this paragraph. (§60.116b(b))

Reporting:
The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation."

Comment #72
Page 55, Condition EU0370-002

The methodology for calculating emissions is provided by formula in 40 CFR §63.465(c). However, it should be noted that Boeing does not remove solid waste described as "SSR(i)" in 40 C.F.R. §63.465(c)(1) from the vapor degreasers subject to 40 C.F.R. Part 63, Subpart T. The liquid solvent described as LSR(i) in 40 C.F.R. §63.465(c)(1) could be contaminated with solids, grease, water, and other materials. In order to address this problem, EPA Region VII has issued a letter determination regarding how to make this calculation, dated March 12, 1997 and published in the Applicability Determination Index, Control Number M970030. According to this guidance, "when calculating the amount of halogenated HAP liquid solvent removed from a solvent cleaning machine, EPA suggests using the same halogenated HAP concentration of the liquid removed as that of the liquid added to the machine." This methodology is used by Boeing and we would like this documented in our statement of basis.

Response to Comment #72:
The APCP agrees with Boeing that EPA has made a decision on this matter, which is located under Applicability Determination Index, Control Number M970030. The above paragraph has been included in the Statement of Basis.

Comment #73
Page 56, Condition EU0370-002, Monitoring

Since there is no "paragraph c" in the permit, please change in the first bullet "paragraph(c)" to "63.465(c)".

Response to Comment #73:
As requested, the above change has been made to the permit condition.

Comment #74
Page 56, Condition EU0370-002, Monitoring

Since Boeing does not use a continuous web cleaning machine, please delete the following phrase

> Except as provided in paragraphs (f) and (g) of this section for continuous web cleaning machines,

Response to Comment #74:

Since the installation does not use a continuous web-cleaning machine the reference to this machine has been deleted from the Permit Condition. The following notation has been made in the Statement of Basis explaining that the paragraphs (f) and (g) of Subpart T are not applicable to the installation.

> "40 CFR Part 63, Subpart T- *Halogenated Solvent Cleaning*
> Paragraphs (f) and (g) of section 63.465 have not been included in the Permit Condition EU0370-002. Paragraphs (f) and (g) deal with compliance for continuos web cleaning machines. The installation does not have or use these type of machines, and thus neither paragraph is applicable to the installation."

Comment #75
Page 56 & 57, Condition EU0370-002, Monitoring

Since the Boeing vapor degreaser has a solvent air interface, please delete the references and equations for vapor degreasers without a solvent/air interface in the second bullet.

Response to Comment #75:

As requested, the references to the vapor degreasers without a solvent/air interface have been removed from the Permit Condition. The following paragraph has been included in the Statement of Basis.

> "40 CFR Part 63, Subpart T- *Halogenated Solvent Cleaning*
> In section §63.465(c)(1) and §63.465(c)(3) of 40 CFR Part 63, Subpart T, there are references to compliance for vapor degreasers without a solvent/air interface. These references have not been included in Permit Condition EU0370-002 since the installation does not utilize vapor degreasers without a solvent/air interface. The vapor degreaser does have a solvent air interface."

Comment #76
Page 57, Condition EU0370-002, Monitoring

Item 4 under the second bullet requires the permittee to calculate potential to emit

from "all solvent cleaning operations." The potential to emit is not required for any calculations performed for 40 CFR Part 63 Subpart T compliance. Please delete item 4.

Response to Comment #76:

The APCP disagrees with Boeings assessment of the permit condition. Boeing is correct that the MACT does not require potential to emit calculation after the applicability level of major/area source has been determined for the installation. However, Boeing is incorrect in concluding that the inclusion of the potential to emit calculation methodology within the permit condition requires the permittee to calculate potential to emit. The potential to emit methodology is included in the permit condition to provide a calculation methodology in case there is a discrepancy on the classification of the MACT emission unit. Therefore, since the inclusion of the calculation methodology does not require the installation to perform the calculation, but rather provides a reference, the permit condition will not be modified as requested. The potential to emit calculation methodology is required from §63.465(e). The wording is directly from the MACT Regulation. The following has been inserted under Item 4 for the mentioned section.

" 4. An owner or operator of a source shall determine their potential to emit from all solvent cleaning operations, using the procedures in paragraphs a. through c. below. A facility's total potential to emit is the sum of the HAP emissions from all solvent cleaning operations, plus all HAP emissions from other sources within the facility. (§63.465(e))

a. Determine the potential to emit for each individual solvent cleaning using equation 1.

PTEi=Hi×Wi×SAIi (1)

Where:
PTEi=the potential to emit for solvent cleaning machine i (kilograms of solvent per year).
Hi=hours of operation for solvent cleaning machine i (hours per year).
=8760 hours per year, unless otherwise restricted by a Federally enforceable requirement.
Wi=the working mode uncontrolled emission rate (kilograms per square meter per hour).
=1.95 kilograms per square meter per hour for batch vapor and cold cleaning machines.
=1.12 kilograms per square meter per hour for in-line cleaning machines.
SAIi = solvent/air interface area of solvent cleaning machine i (square meters). Section 63.461 defines the solvent/air interface area for those machines that have a solvent/air interface. Cleaning machines that do not have a solvent/air interface shall calculate a solvent/air interface area using the procedure in paragraph (e)(2) of this section.

b. Cleaning machines that do not have a solvent/air interface shall calculate a solvent/air interface area using equation 2.

SAI=2.20 * (Vol)0.6 (2)

Where:
SAI=the solvent/air interface area (square meters).
Vol=the cleaning capacity of the solvent cleaning machine (cubic meters).

c. Sum the PTEi for all solvent cleaning operations to obtain the total potential to emit for solvent cleaning operations at the facility. "

Comment #77
Page 57, Condition EU0370-002, Reporting

Some of the applicable wording seemed to be missing. Delete

Reporting:

- Initial Statement of Compliance – due within 150 days of NESHAP or startup, whichever is later.
- Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of § 63.464 shall submit a solvent emission report every year. This solvent emission report shall contain the requirements specified in paragraphs (g)(1) through (g)(4) of this section.
  1. The size and type of each unit subject to this subpart (solvent/air interface area or cleaning capacity).
  2. The average monthly solvent consumption for the solvent cleaning machine in kilograms per month.
  3. The 3-month monthly rolling average solvent emission estimates calculated each month using the method as described in § 63.465(c).
  4. The reports required under paragraphs (f) and (g) of this section can be combined into a single report for each facility.(§63.468(g))
- Each owner or operator of a batch vapor or in-line solvent cleaning machine shall submit an exceedance report to the Administrator semiannually except when, the Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source or, an exceedance occurs. Once an exceedance has occurred the owner or operator shall follow a quarterly reporting format until a request to reduce reporting frequency under paragraph (i) of this section is approved. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. The exceedance report shall include the applicable information in paragraphs (h) (1) through (3) of this section.
  1. Information on the actions taken to comply with § 63.463 (e) and (f). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.
  2. If an exceedance has occurred, the reason for the exceedance and a description of the actions taken.
  3. If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.(§63.468(h))

1. An owner or operator who is required to submit an exceedance report on a quarterly (or more frequent) basis may reduce the frequency of reporting to semiannual if the

conditions in paragraphs (i)(1) through (i)(3) of this section are met.

1. The source has demonstrated a full year of compliance without an exceedance.
2. The owner or operator continues to comply with all relevant recordkeeping and monitoring requirements specified subpart A (General Provisions) and in this subpart.
3. The Administrator does not object to a reduced frequency of reporting for the affected source as provided in paragraph (e)(3)(iii) of subpart A (General Provisions).(§63.468(i))

1. The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.

Replace with

Reporting:

- The permittee shall submit an initial notification report to the Administrator no later than August 29, 1995. (§ 63.468(a))
- Initial Statement of Compliance – due within 150 days of NESHAP or startup, whichever is later. (§ 63.468(c))
- Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of § 63.464 shall submit a solvent emission report every year. This solvent emission report shall contain:
  1. The size and type of each unit subject to 40 CFR Part 63 Subpart T (solvent/air interface area or cleaning capacity). (§ 63.468(g)(1))
  2. The average monthly solvent consumption for the solvent cleaning machine in kilograms per month. (§ 63.468(g)(2))
  3. The 3-month monthly rolling average solvent emission estimates calculated each month using the method as described in § 63.465(c). (§ 63.468(g)(3))
  4. The reports required under §63.468 (f) and (g) can be combined into a single report for each facility.(§63.468(g)(4))
- Each owner or operator of a batch vapor or in-line solvent cleaning machine shall submit an exceedance report to the Administrator semiannually except when, the Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source or, an exceedance occurs. Once an exceedance has occurred the owner or operator shall follow a quarterly reporting format until a request to reduce reporting frequency under §63.468(i) is approved. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. The exceedance report shall include:
  1. Information on the actions taken to comply with § 63.463 (e) and (f). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels. (§ 63.468(h)(1))
  2. If an exceedance has occurred, the reason for the exceedance and a description of the actions taken. (§ 63.468(h)(2))

3. If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.(§63.468(h)(3))

1. An owner or operator who is required to submit an exceedance report on a quarterly (or more frequent) basis may reduce the frequency of reporting to semiannual if:
   1. The source has demonstrated a full year of compliance without an exceedance. (§ 63.468(i)(1))
   2. The owner or operator continues to comply with all relevant recordkeeping and monitoring requirements specified subpart A (General Provisions) and in this subpart. (§ 63.468(i)(2))
   3. The Administrator does not object to a reduced frequency of reporting for the affected source as provided in paragraph (e)(3)(iii) of subpart A (General Provisions). (§63.468(i)(3))

1. The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of the applicable 3-month rolling average in the Emission Limitation.

Response to Comment #77:

The "Reporting" section has been modified as a result of the comment. However, the initial notification and initial statement of compliance reports were not included since the installation has already completed those reporting requirements. The statement of basis has been modified to reflect the completion of the initial notification and initial statement of compliance reports. The "Reporting" section has been modified to the following:

"Reporting:

- The permittee shall submit an initial notification report to the Administrator no later than August 29, 1995. (§63.468(a))
- Initial Statement of Compliance – due within 150 days of NESHAP or startup, whichever is later.
- Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of § 63.464 shall submit a solvent emission report every year. This solvent emission report shall contain:
  1. The size and type of each unit subject to 40 CFR Part 63, Subpart T (solvent/air interface area or cleaning capacity). (§63.468(g)(1))
  2. The average monthly solvent consumption for the solvent cleaning machine in kilograms per month. (§63.468(g)(2))
  3. The 3-month monthly rolling average solvent emission estimates calculated each month using the method as described in § 63.465(c). (§63.468(g)(3))
  4. The reports required under paragraphs (f) and (g) of this section can be combined into a single report for each facility. (§63.468(g)(4))
- Each owner or operator of a batch vapor or in-line solvent cleaning machine shall submit an exceedance report to the Administrator semiannually except when, the Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source or, an exceedance occurs. Once an exceedance has occurred the owner or operator shall follow a quarterly reporting format until a request to reduce reporting frequency

under paragraph (i) of this section is approved. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. The exceedance report shall include:

1. Information on the actions taken to comply with § 63.463 (e) and (f). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels. (§63.468(h)(1))
2. If an exceedance has occurred, the reason for the exceedance and a description of the actions taken. (§63.468(h)(2))
3. If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.(§63.468(h)(3))

- An owner or operator who is required to submit an exceedance report on a quarterly (or more frequent) basis may reduce the frequency of reporting to semiannual if :
  1. The source has demonstrated a full year of compliance without an exceedance. (§63.468(i)(1))
  2. The owner or operator continues to comply with all relevant recordkeeping and monitoring requirements specified subpart A (General Provisions) and in this subpart. (§63.468(i)(2))
  3. The Administrator does not object to a reduced frequency of reporting for the affected source as provided in paragraph (e)(3)(iii) of subpart A (General Provisions).(§63.468(i)(3))
- The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation."

Comment #78
Page 58, Condition EU0370-003, Emission limitation

The first line should reference "Each vapor degreaser" not "Each cold cleaner".

Response to Comment #78:

As requested, the reference has been changed from "Each cold cleaner" to "Each vapor degreaser."

Comment #79
Page 59, Condition EU0370-003, Emission limitation

Item 5 has a typo. "avoce" ????

Item 8 has a typo. "proff" ????

Response to Comment #79

As requested, the typographical errors have been corrected in the draft operating permit. The typo "avoce" was replaced with the correct word "above" while the typo "proff" was replaced with the correct word "proof."

Comment #80
Page 60, EU0400

This unit is no longer present. Please remove it from the permit.

Response to Comment #80:

Please refer to Response to Comment #43 from the April 14, 2003 comment letter.

Comment #81
Page 61, Condition (EU0380 through EU0390)-002, Operation Limitation

The units only burn natural gas, not fuel oil.

Response to Comment #81

As requested, the proper fuel has been included in the draft operating permit. The Operation Limitation now states, "The emission unit shall be limited to burning natural gas."

Comment #82
Page 61, Condition (EU0380 through EU0390)-002, Monitoring/Record Keeping

The units are natural gas units. The fact that they burn natural gas is how compliance is verified. The sulfur content of the natural gas does not need to be verified. Please remove the requirement for maintaining fuel receipts.

Response to Comment #82:

The APCP disagrees with Boeing's assessment of the permit condition. The emission units are limited to burning natural gas and therefore must demonstrate compliance with the limit by maintaining fuel receipts. The receipts are to be maintained to prove that only natural gas is being utilized by the emission unit and no other fuel is being used for combustion by these units. Therefore, the permit condition has not been modified to change the requirement of maintaining fuel receipts.

Comment #83
Page 61, Condition (EU0380 through EU0390)-002, Reporting

The first bullet implies that other fuels may be used so long as the agency is notified within 10 days of the fuel switch. The operational limitation states that the only fuel that may be used is natural gas (corrected from number 2 fuel oil). If the unit can only use one fuel, then there is no notification possible. If the unit can change fuels, but must notify the agency within 10 days, then the operational limit is incorrect and excess. Therefore please delete the operational limitation or the reporting requirement.

Response to Comment #83:

As requested, these units will only be permitted to burn one type of fuel, and therefore, any change in fuel types would be a violation of the Operation Limitation established by this Permit Condition. The reporting requirement that the installation

must notify the agency within ten days of any fuel switch has been removed from the permit condition.

Comment #84
Page 61-64, EU0410 through EU0460 and EU0470 through EU0530

Please combine all of these units into a single unit. The agency has listed natural gas units less than 10 MMBTU/hr, but greater than 1 MMBTU/hr MHDR. In the previous permit these were all grouped as one single unit. We feel there is no reason not to group them now. They are all natural gas units that are less than 10 MMBTU/hr MHDR individually. They were grouped on form C02 in the application as insignificant activities. It would be appropriate to include these in a single emission unit covered by 10 CSR 10-5.030 and 10 CSR 6.260. The existing and new requirements of 10 CSR 10-5.030 could both be included in that unit. (Note that as currently written the permit shows EU0530 (CS-STC-01) as a new unit under 10 CSR 10-5.030. Some of the heaters included in that unit are new, but some are existing.)

Response to Comment #84:

According to 10 CSR 10-6.020, an emission unit is defined as:

> "Any part or activity of an installation that emits or has the potential to emit any regulated air pollutant or any polllutant listed under section 112(b) of the Act. This term is not meant to alter or affect the definition of the term unit for the purposes of Title IV of the Act."

Each piece of combustion equipment contains a specific limit and is therefore its own emission unit. In addition, the installation and inspectors need to be able to distinguish between the units in regards to compliance provisions. Therefore, the combustion equipment will not be grouped as one single unit as the installation requested. The APCP supports grouping of emission units with the same emission limit. However, since the emission units do not contain the same emission limit, it would be clearer to the installation and other readers if the new and existing equipment were separated into different permit conditions. Therefore, the permit conditions have not been modified as requested.

Comment #85
Page 61 and 63, (EU0410 through EU0460)-001 and (EU0470 through EU0530)-001, Emission Limitation

We request that the calculated number not be inserted into the permit. Insignificant activities may be modified/added/removed without any permit modification. However, the facilities overall MHDR may change when these changes are made causing the emission limitation listed in the permit to be incorrect.

Response to Comment #85:

Please refer to Response to Comment #57 from the April 14, 2003 comment letter.

Comment #86
Page 61 and 63, (EU0410 through EU0460)-001 and (EU0470 through EU0530)-001

The permit conditions are missing the –001

Response to Comment #86

As requested, the –001 has been added to the permit condition.

Comment #87

Page 62 and 64, (EU0410 through EU0460)-001 and (EU0470 through EU0530)-001, Monitoring/Record Keeping

Please put the potential emission rate in the Statement of Basis instead of having a separate record keeping requirement. The Statement of Basis is already required to be kept with the Title V permit.

The potential to emit particulates from EU0410 through EU0530 (based on AP-42 emission factors) is:

Natural Gas:

(7.6 #/MMSCF) / (1,020 MMBTU/MMSCF) = **7.451 * 10^-3 lb/MMBTU**

This is less than the limit.

Response to Comment #87:

Please refer to Response to Comment #57 from the April 14, 2003, comment letter.

Comment #88

Page 62 and 64, Condition, (EU0410 through EU0460)-002 and (EU0470 through EU0530)-002

The permit condition are missing the –002

Response to Comment #88

As requested, the –002 has been added to the permit condition.

Comment #89

Page 62 and 64, Condition, (EU0410 through EU0460)-002 and (EU0470 through EU0530)-002, Emission Limitation

The emission limitations for these units apply to fuel oil and coal. These units only burn natural gas.

Response to Comment #89:

The installation is correct that the regulation only applies for fuel oil and coal. The emission limitation has been modified with the following:

"***Emission Limitation:***

- No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in

10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(4)]"

Comment #90
Page 62 and 64, Condition, (EU0410 through EU0460)-002 and (EU0470 through EU0530)-002, Monitoring/Record Keeping/Reporting

The second and fourth bullets imply that other fuels may be used so long as the agency is notified within 10 days of the fuel switch. The operational limitation states that the only fuel that may be used is natural gas. If the unit can only use one fuel, then there is no notification possible. If the unit can change fuels, but must notify the agency within 10 days, then the operational limit is incorrect and excess. Therefore please delete the operational limitation or the reporting requirements.

Response to Comment #90

Please refer to Response to Comment #83 from the April 14, 2003, comment letter.

Comment #91
Page 62, Condition, (EU0410 through EU0460)-002 and (EU0470 through EU0530)-002, Monitoring/Record Keeping/Reporting

The language following the third bullet is either excess or incomplete.

Response to Comment #91:

The Monitoring/Record Keeping/Reporting language for the third bullet has been modified to the following:

"Monitoring/Record Keeping/Reporting:

- The permittee shall submit an excess emissions report for each calendar quarter to the director within thirty (30) days following the end of each calendar quarter.
- The permittee shall report to the APCP Enforcement Section, PO Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of 10 CSR 10-6.260."

Comment #92
Page 64, EU0550

This unit has been removed. Please remove it from the permit.

Response to Comment #92:

Please refer to Response to Comment #43 from the April 14, 2003, comment letter.

Comment #93
Page 65, EU0560

This unit has been removed. Please remove it from the permit.

Response to Comment #93:

Please refer to Response to Comment #43 from the April 14, 2003, comment letter.

Comment #94

Page 66, EU0570

This unit has been removed. Please remove it from the permit.

Response to Comment #94:

Please refer to Response to Comment #43 from the April 14, 2003, comment letter.

Comment #95

Page 68, 10 CSR 10-5.070, *Open Burning Restrictions*

Paragraph (e.), Please delete the phrase "and previous DNR inspection reports". This recordkeeping is not required by the regulation and is overly broad. For example, RCRA DNR inspection reports would need to be kept under the Title V permit.

Response to Comment #95:

The APCP does not agree with Boeing's interpretation of the permit condition. Since the Title V permit is a requirement of the Clean Air Act, it does not have the authority to require RCRA inspection reports. The reports being referenced in this permit condition are DNR Air inspection reports. Therefore, the phrase will not be deleted as requested.

Comment #96

Page 69, 10 CSR 10-6.080, Emission Standards for Hazardous Air Pollutants
40 CFR Part 61 Subpart M, National Emission Standard for Asbestos

To clarify what is required under 40 CFR Part 61 Subpart M, please reword this section as follows:

10 CSR 10-6.080
Emission Standards for Hazardous Air Pollutants
40 CFR Part 61 Subpart M
National Emission Standard for Asbestos

Emission Limitations:

(1) Before engaging in any renovation or demolition activity that would disturb more than 260 linear feet of regulated asbestos containing material ("RACM") on pipes or 160 square feet of RACM on other building components, the permittee shall hire a certified asbestos abatement contractor to abate the RACM in the part of the facility that will be disturbed by the renovation or demolition activity.

(2) Prior to commencement of any demolition or renovation activity at the facility, the permittee shall inspect the part of the facility that will be affected by the demolition or renovation activity for RACM.

(3) The permittee shall require the certified asbestos abatement contractor hired to abate RACM in accordance with subsection (1) above to comply with the following:

(a) the work practices for asbestos emission control pursuant to 61.145(c);

(b) the work practices and procedures for waste disposal pursuant to 61.150; and
(c) the work practices for air cleaning pursuant to 61.152.

Monitoring/Record Keeping:
The permittee or its qualified asbestos abatement contractor shall keep records as required by 40 CFR 61.145(c)(7), 61.145(c)(8) and 61.150(d)(1).

Reporting:
(1) Notices required by 61.145(b) shall be submitted by the Missouri Certified Asbestos Abatement contractor or the permittee.
(2) These notices do not need to be certified by a responsible official.

Response to Comment #96:

The wording that is included in the Core Permits Requirement Section that is included in all Title V permits that are issued by the State of Missouri. The agency believes that consistency should be essential for the Core Permits Requirements Section to ease in readability for installations, inspectors, and the general public. In addition, the wording for the Core Permits Requirement Section has been approved by EPA Region VII.

The agency does appreciate the installation's suggestions for the rewording concerning 40 CFR Part 61, Subpart M. The agency recommends that the installation adopt and maintain the suggested wording as a locally Operating Procedure. The agency will evaluate and consider adopting the new wording for future Title V Operating Permits. However, for the purposes of this Operating Permit, the language will be consistent with the language from the EPA approved wording that was part of the draft Title V Operating Permit.

Comment #97

Page 69, 10 CSR 10-6.250, *Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements*

The requirements for 10 CSR 10-6.250 on pages 69 and SB-1 seem to conflict. Additionally, in EPA's order dated July 31, 2002 responding to the Sierra Club-Ozark Chapter petition that EPA object to Doe Run Company's operating permit, Petition No. VII-1999-001, it is stated:

> "With regard to Condition PW002,for reasons not raised by the Petitioner, but otherwise identified by EPA Region 7,EPA will ask the permitting authority to remove the "Asbestos Abatement Projects -Certification, Accreditation, and Business Exemption Requirements " found at 10 CSR 10-6.250 from the title V permit. These asbestos-related requirements are not derived from Clean Air Act authority and therefore may not be placed in the title V permit as federally-enforceable Clean Air Act requirements."

Please clarify the current requirements under 10 CSR 10-6.250.

Response to Comment #97:
The information on SB-1 is an incomplete justification. The justification generally included on SB-1 is the omission of 10 CSR 10-6.240, *Asbestos Abatement Projects – Registration, Notification and Performance Requirements*, from the Part 70 (Title V) operating permit. The requirements of 10 CSR 10-6.250, *Asbestos Abatement Projects – Certification, Accreditation and Business Exemption Requirements*, are applicable requirements at the state level and must be included in the Title V operating permit as "state only enforceable". Please note: The last sentence of the July 31, 2002, order referenced above:

> "These asbestos-related requirements are not derived from Clean Air Act authority and therefore may not be place in the title V permit as federally-enforceable Clean Air Act requirements."

In addition, this issue was also discussed in the March 20, 2002, EPA Region VII response to the Ozark Chapter of the Sierra Club regarding potential deficiencies in the construction or implementation of Missouri's title V operating permit program:

> "The asbestos-related requirements in 10 CSR 10-6.250 are not derived from Clean Air Act authority and therefore may not be placed in the title V permit as federally-enforceable Clean Air Act requirements. Accordingly, these requirements should be clearly identified in permits as "State only enforceable."

Therefore, the permit condition for 10 CSR 10-6.250 is applicable and will be marked as "State only enforceable". In addition, the Statement of Basis will be modified to clearly indicate the non-applicability of 10 CSR 10-6.240.

Comment #98
Page 72, V. General Permit Requirements, General Record Keeping and Reporting Requirements, II) Reporting, A) 3)

There does not seem to be any regulatory basis for this requirement. Please delete II) Reporting, A) 3).

Response to Comment #98:
The APCP disagrees with Boeing's interpretation of the General Permit Requirements regarding the General Record Keeping and Reporting Requirements listed under II)Reporting, A)3). The condition being referred to is as follows:

II) Reporting
- A) The permittee shall submit a report of all required monitoring by:
  1. October 1st for monitoring which covers the January through June time period, and
  2. April 1st for monitoring which covers the July through December time period.
  3. Exception: Monitoring requirements which require reporting more frequently than semi annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.

The reporting requirements are authorized under 10 CSR 10-6.065(6)(C)1.C.(III): "With respect to reporting, the permit shall incorporate all applicable reporting

requirements and require the following:"
(a): "A permit issued under these rules shall require the permittee to submit a report of any required monitoring every six months. To the extent possible, the schedule for submission of these reports shall be timed to coincide with other periodic reports required by the permit, including the permittee's annual compliance certification:"
The requirements in II)A)1 through II)A)3), clearly identify the schedule for submission of the semi-annual monitoring reports. Specifically II)A)3), clarifies that the reporting deadlines for the semi-annual monitoring reports do not satisfy the deadlines for the quarterly monitoring reports previously identified in the operating permit.

Comment #99
Page 72, V. General Permit Requirements, General Record Keeping and Reporting Requirements, II) Reporting, B)

This is not the regulatory language and has a different meaning than the regulatory language. The language in the draft permit is:

> "Each report must identify any deviations from emission limitations, monitoring, record keeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances."

The regulatory language from 10 CSR 10-6.065(6)(C)1.C III.(b) is:

> "(b) Each report submitted under subpart (6)(C)1.C.(III)(a) of this rule shall identify any deviations from permit requirement, since the previous report, that have been monitored by the monitoring systems required under the permit, and any deviations from the monitoring, recordkeeping and reporting requirements of the permit;"

The regulatory language should be used.

Response to Comment #99:
The APCP agrees with the regulatory reference to 10 CSR 10-6.065(6)(C)1.C.(III)(b), however the APCP disagrees with Boeing's interpretation of the permit condition. The information identified in the General Permit Requirements regarding the General Record Keeping and Reporting Requirements listed under II)Reporting, B) is consistent with the requirements of 10 CSR 10-6.065(6)(C)1.C.(III)(b), therefore no changes will be made to the permit condition as requested.

Comment #100:
Page 72, V. General Permit Requirements, General Record Keeping and Reporting Requirements, II) Reporting, D)

There appears to be a typo in the permit language. There should be a section 3) following "as soon as practicable." and before "Any other deviations". There also could be a section 4) which identifies the address for the reports. This would make it

clear that all three types of supplemental reports were to be sent to that same address.

This is not the regulatory language. Listing the ten (10) days under A) makes it unclear when reports required under 1) or 2) are required. According to A) all supplemental reports are required no later than 10 days after any exceedance... However, under 1) reports are required within two (2) working days and under 2) reports are required as soon as practicable. In addition, the deadline for other supplemental reports is listed under 3) below and under reports for each individual unit.

Also, the language in the permit specifies any exceedance of any applicable rule, which is far more inclusive than the regulatory language. If all supplemental reports are desired for all excedances, even those which pose no imminent or substantial danger to the public health, safety, or the environment, then each of those terms should be identified under the reporting for each emission unit as gap filling, which it already is. The language from 10 CSR 10-6.065 should not be modified.

The language in the draft permit is:

> "A) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten (10) days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
>
> 1. Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7 of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two (2) working days after the date on which the emission limitation is exceeded due to the emergency, if you wish to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and that you can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
> 1. Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
>
> Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in the permit. These supplemental reports shall

be submitted to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 no later than ten (10) days after any exceedance of any applicable rule, regulation, or other restriction."

The regulatory language from 10 CSR 10-6.065(6)(C)1.C III.(c) is:

"(c) In addition to semiannual monitoring reports, each permittee shall be required to submit supplemental reports as indicated here. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative
measures taken.
I. Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7. of this rule shall be submitted to the permitting authority either verbally or in writing within two (2) working days after the date on which the emission
limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that
indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted facility must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to
minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken.
II. Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
III. Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in the permit;"

The regulatory language should be used.

Response to Comment #100:

The initial suggestion regarding the formatting was not a typographical error. However, the APCP agrees the suggested formatting regarding the numbering would assist in understanding the reporting requirements. Therefore, the wording has been modified to the following:

- Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
- Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in the permit.
- These supplemental reports shall be submitted to the Air Pollution Control Program,

Enforcement Section, P.O. Box 176, Jefferson City, MO 65102 no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.
The APCP agrees with the regulatory reference to 10 CSR 10-6.065(6)(C)1.C.(III)(c), however the APCP disagrees with Boeing's interpretation that the reporting requirements are unclear. The information identified in the General Permit Requirements regarding the General Record Keeping and Reporting Requirements listed under II)Reporting, D) is consistent with the requirements of 10 CSR 10-6.065(6)(C)1.C.(III)(c). The Reporting under II)D) states supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. These are what would be considered an uneventful exceedance. The reporting under II)D)1) and 2) goes on to further clarify if the exceedance is due to an emergency or upset condition or if the deviation poses an imminent and substantial danger then the installation must report on a quicker timetable. Therefore, no changes will be made to the permit condition as required.

Comment #101
Page 73, General Record Keeping and Reporting Requirements, 10 CSR 10-6.065(6)(C)1.C, II) Reporting E)

Please clarify in the statement of basis. This section seems to deal with the reports required by 10 CSR 10-6.065. However, a Title V permit may include many reports that are not required by 10 CSR 10-6.065, but are required by some other applicable requirement. Are these reports required to be certified? In some cases these reports may be minor monthly reports, such as our coal reports for our St. Louis Facility, that have been submitted for many years without certification.

Response to Comment #101:
Please refer to Response to Comment #6 from the February 20, 2003, comment letter. The statement of basis will be modified to include the response to comment #6 from the February 20, 2003, comment letter.

Comment 102
Page 74

The following are listed without any requirements:

Reasonably Anticipated Operating Scenarios
10 CSR 10-6.065(6)(C)1.I.

Emissions Trading
10 CSR 10-6.065(6)(C)1.J.

Response to Comment #102:
Since Boeing did not request any specific operating scenarios or emission trading provisions in the operating permit application, the two requirements should have been deleted from the Operating Permit. Therefore, the Reasonably Anticipated Operating Scenarios and Emissions Trading headings have been deleted from the operating

permit.

Comment #103
Page 74, Compliance Requirements, 10 CSR 10-6.065(6)(C)3., I)

The language from the draft permit is:

> "I) Any document (including reports) required to be submitted **under this permit** shall contain a certification signed by the responsible official." (Bold added)

The regulatory language from 10 CSR 10-6.065(6)(C)3. is:

> "A. General requirements, including certification. Consistent with the monitoring and related recordkeeping and reporting requirements of this paragraph, the operating permit must include compliance certification, testing, monitoring, reporting and recordkeeping requirements sufficient to assure compliance with the terms and conditions of the permit. Any document (including reports) required to be submitted **under this rule** shall contain a certification signed by a responsible official as to the results of the required monitoring." (Bold added)

The permit incorporates many other rules. These rules may have reporting requirements that become a requirement of the permit, but they are not a requirement of 10 CSR 10-6.065 – the rule. The fact that this language has been changed is an indication that the agency recognized this distinction. The fact that this language has been changed is an indication that the agency recognized this distinction.

Please correct this, so that the meaning of the permit is the same as the meaning in the underlying rule. Not correcting this discrepancy would result in requiring the responsible official to certify minor reports that may be due monthly, or even weekly. These reports may have been submitted to the agency for years under the regulations/construcion permits that require them. They should not be certified by the responsible official now.

Response to Comment #103:
Please refer to Response to Comment #6 from the February 20, 2003, comment letter. Therefore, no changes have been made to the operating permit as requested.

Comment #104
Page 74, Compliance Requirements, 10 CSR 10-6.065(6)(C)3., IV)

Two issues with the following language:

> "These certifications shall be submitted annually on April 1st, unless the applicable requirement specifies more frequent submission."

This would be better written by substituting "by" for "on". The report must be submitted by April 1st not necessarily on April 1st.

What does the language following "unless" mean? If we have a MACT standard, which requires a quarterly report (or compliance certification) do we now have to submit my Title V compliance certification quarterly? Do we now have to submit a Title V compliance certification for the covered unit(s) separately from the rest of the facility? Do we have to submit two compliance certifications quarterly? (One for the MACT and one for the operating permit) Please change the language to:

"These certifications shall be submitted annually by April 1st.

Response to Comment #104:

The APCP agrees with Boeing that "by" is a more appropriate term than "on". Therefore, the phrasing has been modified to "by April 1st".

The APCP assumes the paragraph being referred to is as follows:

> "The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually on April 1st, unless the applicable requirement specifies more frequent submission."

The language following unless means if an applicable requirement (NSPS, MACT, NESHAP, Compliance Plan, Consent Agreement, Settlement Agreement, etc) requires a more frequent compliance report than annually, then the installation is required to submit an annual report to satisfy the requirements of Title V and submit a quarterly report (for example) to satisfy the requirements of the other standard. This does not require additional Title V reporting requirements unless the installation specifically requests to do so. The requirements for the annual Title V compliance certification do not change to quarterly. This does not require separate Title V compliance reports for the covered unit(s). It does however, require a separate compliance report to satisfy the specific applicable reporting requirement.

Comment #105

Page 75, Emergency Provisions, 10 CSR 10-6.065(6)(C)7.

Please change "you" to "permittee".

Response to Comment #105:

As requested, the permit condition language has been modified to replace "you" with "permittee"..

Comment 106:

Page 76-77, Responsible Official, 10 CSR 10-6.020(2)(R)12.

Please add the following sentence:

The Vice President of the Shared Services Group (Gerard J. Olsen) and the Director of Safety, Health and Environmental Affairs (Michael J. Dwyer) may serve as alternate Responsible Officials should Mr. Van Gels be unavailable.

Response to Comment 106:

As requested, the responsible condition portion has been modified to include the Vice President of the Shared Services Group (Gerard J. Olsen) and the Director of Safety, Health and Environmental Affairs (Michael J. Dwyer) as alternate responsible officials should Mr. Van Gels be unavailable. . The installation should note that if any of the people named should terminate employment with the installation or if a new responsible official is named, the installation is required to report with a written notification to the Air Pollution Control Program. In addition, if a new person takes over the positions of The Vice President of the Shared Services Group or the Director of Safety, Health and Environmental Affairs, the newly appointed person would not be considered a Responsible Official until written notification is provided to the Air Pollution Control Program requesting an Administrative Amendment to the Operating Permit. Only the three people named in the Operating Permit will have the authority to sign reports as the Responsible Official.

Comment #107

Page 77, Reopening Permit For Cause, 10 CSR 10-6.065(6)(E)6.

Paragraph 3), change the word "ot" to "to"

Response to Comment #107

As requested, the typographical error of "ot" has been modified to "to".

Statement of Basis, General Comments

Comment #108

Page SB-1, Other Air Regulations Determined Not to Apply to the Operating Permit

10 CSR 10-6.080 and 10 CSR 10-6.250 are included in the permit as applying to the facility. (See page 69 of the draft permit).

Response to Comment #108:

The installation is subject to the requirements of 10 CSR 10-6.080 and 10 CSR 10-6.250 should the installation undertake any projects that deal with or involve any asbestos containing materials. To minimize modifications and include all applicable requirements, the requirements of 10 CSR 10-6.080 and 10 CSR 10-6.250 are included in the operating permit. Therefore, the references in the Statement of Basis that these rules do not apply to the installation have been removed from the operating permit.

Comment #109

SB-3, 40 CFR Part 63, Subpart Q

Change the word "operatied" to "operated"

Please add the fact that Boeing does not use a "control device" as defined by 40 CFR Part 63, Subpart GG in primer or topcoat application or depainting operations.

Response to Comment #109:

As requested, the typographical error for "operatied" has been modified to "operated."

The statement of basis has been modified to include a description and explanation of the control device and control system requirements of 40 CFR Part 63, Subpart GG as they apply to the installation.

Comment #110

Page SB-12 through SB-13, EU0140

This unit is now Emission Unit # MB-505-01.

Response to Comment #110:

As requested, the Emission Unit number has been modified to MB-505-01

Comment #111

Page SB-13 through SB-15, EU0150

This unit has been removed and this information can be removed from the Statement of Basis.

Response to Comment #111:

Please refer to Response to Comment #43 from the April 14, 2003, comment letter. The information for this emission unit has been removed from the Statement of Basis.

Comment #112

Page SB-16, Additional Recommended Permit Revision #6

This comment states that if there were any leaking spray guns, the permittee would also be required to report to the agency within ten days. EU0030-001 addresses leaking spray gun cleaners, but not leaking spray guns. The permittee is unaware of any regulation that regulates whether spray guns leak or not, or requiring reporting leaking spray guns.

Response to Comment #112:

Boeing is correct, the reference should have been "leaking spray gun cleaners." The reference has been modified as requested in the Statement of Basis.

Comment #113

Page SB-16 through SB-17, Additional Recommended Permit Revision #8

Boeing appreciates the agency's clarification of the significance of incorporating the

construction permits by reference.

Response to Comment #113:

The APCP notes the installation's appreciation and likes to extend its own appreciation to the installation for allowing the APCP to explain and for understanding the importance behind the incorporation of Construction Permits by reference.

Comment #114

Page SB-18, Additional Recommended Permit Revision #10

Boeing has requested the pressure drop limits not be included. If these requests are accepted this provision should be modified to reflect the change.

Response to Comment #114:

The APCP notes the installation's objection to the inclusion of the pressure drop limits. Please refer to Response to Comment #3 of the February 20, 2003, comment letter. Therefore, the statement of basis has been modified to include the explanation in Response to Comment #3 of the February 20, 2003, comment letter.

Comment #115

Page SB-18, 2. 10 CSR 10-5.330

The second paragraph references Boeing's St. Louis County facility. This facility is Boeing's St. Charles County facility.

Response to Comment #115:

The APCP agrees with Boeing, the reference has been changed from "St. Louis County" to "St. Charles."

Comment #116

Page SB-18, 4.

EU0040 and EU0050 are not identified in any previous permit or other document. Based on construction permit number 0396-014, these must be the cold cleaners that were identified in the previously issued permit as CC-598-02 and CC-598-03. These units have been removed and were replaced by CC-505-01. (CC-505-01 is a solvent based cold cleaner used for cleaning electrical components (e.g., circuit boards).) This was documented in letter 464C-BSS-4845 and sent to Missouri Department of Natural Resources on November 12, 1999. Please include this unit in the permit. It is covered by construction permit number 0396-014.

Response to Comment #116:

The unit CC-505-01 has been placed in the operating permit as EU0020 with 10 CSR 10-5.300 and Construction Permit 0396-014 being applicable. The permit condition is below. The wording in the Statement of Basis has also been revised to reflect that CC-598-02 and CC-598-03 are not at the installation.

"Permit Condition (EU0020)-002

10 CSR 10-6.060
Construction Permits Required
Construction Permit #0396-014

Emission Limitation:
The total combined emissions of volatile organic compounds (VOCs) from the operation of Emission Unit EU0020 shall be limited to 12.2. tons in any consecutive 12-month period. (Special Condition 1)

Monitoring/Record Keeping:
Records (use Attachment F or an equivalent form) shall be kept for the most recent five year period of operation that show the tons of VOC emitted from EU0020. All emissions shall be calculated using material mass balance based on 100% VOC content of the solvent used. The records shall contain both the monthly and 12-month totals. These records shall be made available to the Department of Natural Resources personnel upon request. (Special Condition 2)

Reporting:
The permittee shall report to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the end of each month, if the 12-month cumulative total (Monitoring/Record Keeping requirement) records show that the source exceeded the Emission Limitation of this Permit Condition. (Special Condition 3) "

The following explanations have been included in the Statement of Basis as items 2, 3 and 4 of the section labeled, "*Construction Permit Revisions.*"

"2. Construction Permit #0396-014
This Construction Permit was issued as being applicable to Emission Units CC-598-02 and CC-598-03. In a letter dated November 12, 1999, the installation informed the APCP these units had been removed and replaced with Emission Unit EU0020 (CC-505-01). On February 8, 2000, the Air Pollution Control Program responded in an amendment letter approving the reclassification of both CC598-02 and CC598-03 to CC505-01. The letter further states that Construction Permit #0396-014 would not be modified but that the revisions would be made in the Operating Permit upon renewal. The letter was labeled as Construction Permit #0396-014A. The Operating Permit has been written with Construction Permit #0396-014 applying to CC-505-01, which is EU0020."

"3. Construction Permit #0396-014
Special Condition 4 was included in Construction Permit #0396-014 instructing the installation to remove Vapor Degreaser (VD) 500-02, VD 500-03, VD 500-04, and VD 500-05. The

installation has removed these units, therefore the permit condition has not been included in the Operating Permit."

"4. Construction Permit #0396-014

Special Condition 5 lists emission units that had already been removed from the installation before the issuance of Construction Permit #0396-014. Since the units had already been removed and are currently no longer at the installation, Special Condition 5 has not been included in the Operating Permit."

Attachment A

Permit Condition (EU0060 through EU0120)-002

10 CSR 10-6.075
Maximum Achievable Control Technology Regulations
40 CFR Part 63, Subpart GG
National Emission Standards for Aerospace Manufacturing and Rework Facilities
40 CFR Part 63, Subpart A
General Provisions
10 CSR 10-5.295
Control of Emissions from Aerospace Manufacturing and Rework Facilities

Emission Limitation:

1. VOC Limits:
a. VOC emissions from primers shall be limited to a VOC content level of no more than 350 grams per liter (2.9 pounds per gallon) of primer (less water and exempt solvent) as applied. (§63.745(c)(2))
b. VOC emissions from topcoats shall be limited to a VOC content level of nor more than 420 grams per liter (3.5 pound per gallon) of self-priming topcoat (less water and exempt solvent) as applied. (§63.745(c)(4))
c. The VOC content limits listed in Appendix A (Table 1 of 10 CSR 5.295) expressed in pounds per gallon of coating, excluding water and exempt solvent, delivered to a coating applicator that applies specialty coatings.
2. Organic HAP Limits:
a. Organic HAP emissions from primers shall be limited to an organic HAP content level of no more than 350 grams per liter (2.9 pound per gallon) of primer (less water), as applied. (§63.745(c)(1))
b. Organic HAP emissions from topcoats shall be limited to an organic HAP content level of no more than 420 grams per liter (2.9 pounds per gallon) of self-priming topcoat as applied. (§63.745(c)(3))
3. *Compliance Methods.*
d. Compliance with the organic HAP and VOC content limits specified in paragraphs (c)(1) through (c)(4) of §63.745 shall be accomplished by using the following methods either by themselves or in conjunction with one another. (§63.745(e))

Use primers and topcoats (including self-priming topcoats) with HAP and VOC content levels equal to or less than the limits specified in paragraphs (c)(1) through (c)(4) of §63.745. (§63.745(e)(1))

Use the averaging provisions described in §63.743(d) below: (§63.745(e)(2))

Instead of complying with the individual coating limits in §63.745, a facility may choose to comply with the averaging provisions specified in paragraphs (1) through (4) below: (§63.743(d))

(1) The permittee of an existing source shall use any combination of primers and topcoats (including self-priming topcoats) such that the monthly volume-weighted average organic HAP and VOC contents of the combination of primers and topcoats, as determined in accordance with the applicable procedures set forth in §63.750, complies with the specified content limits in §63.745(c),

unless the permitting agency specifies a shorter averaging period as part of an ambient ozone control program. (§63.743(d)(1))

(2) Averaging is allowed only for uncontrolled primers and topcoats (including self-priming topcoats). (§63.743(d)(2))

(3) Averaging is not allowed between primers and topcoats (including self-priming topcoats). (§63.743(d)(3))

(4) Each averaging scheme shall be approved in advance by the permitting agency and adopted as part of the facility's Title V permit. (§63.743(d)(6))

e. The primer application is considered in compliance when the conditions specified in paragraphs (1) to (2) below are met. Failure to meet any one of the conditions indentified in these paragraphs shall constitute noncompliance. (§63.749(d)(3))

(4) The overall control system efficiency, Ek, as determined using the procedure specified in §63.750(h) for control systems with control systems other than carbon absorbers, is equal to or greater than 81% during initial performance test and any subsequent performance test; (§63.749(d)(3)(ii)(A))

(5) Operates all application techniques in accordance with the manufacture's specificaitons or locally prepared operating procedures, whichever is more stringent. (§63.749(d)(3)(iv))

f. The topcoat application operation is considered in compliance when the conditions specified in paragraphs (1) through (2) are met. Failure to meet any of the conditions identified in these paragraphs shall constitute noncompliance. (§63.749(d)(4))

(4) The overall control system efficiency, Ek, as determined using the procedures specified in §63.750(h) for control systems with control devices other than carbon absorbers, is equal to or greater than 81% during initial performance test and any subsequent performance test; (§63.749(d)(4)(ii))

(5) Operates all application techniques in accordance with the manufacture's specificaitons or locally prepared operating procedures, whichever is more stringent. (§63.749(d)(4)(iv))

4. *Inorganic HAP emissions – primer and topcoat application operations.*

a. For each primer or topcoat application operation that emits organic HAP, the operation is in compliance when: (§63.749(e))

(1) It is operated according to the requirements specified in §63.745(g)(1) through (g)(3); (§63.749(e)(1))

(2) It is shut down immediately whenever the pressure drop or water flow rate is outside the limit(s) established for them and is not restarted until the pressure drop or water flow rate is returned within these limit(s), as required under §63.745(g)(3). (§63.749(e)(2))

b. Inorganic HAPs– The permittee shall comply with the following applicable requirements: (§63.745(g))

1. Apply these coatings in a booth or hangar in which air flow is directed downward onto or across the part or assembly being coated and exhausted through one or more outlets. (§63.745(g)(1))
2. Control the air stream from this operation as follows: (§63.745(g)(2))
   a. For existing sources (EU0060 through EU0130), the permittee must choose one of the following: (§63.745(g)(2)(i) and (ii))
      i. Before exhausting it to the atmosphere, pass the air stream through a dry particulate filter system certified using the methods described in §63.750(o) to meet or exceed the efficiency data points in Tables 1 and 2 of §63.745(g); or. (§63.745(g)(2)(i)(A))

ii. Before exhausting it to the atmosphere, pass the air stream through a waterwash system that shall remain in operation during all coating application operations; or (§63.745(g)(2)(i)(B))

iii. Before exhausting it to the atmosphere, pass the air stream through an air pollution control system that meets or exceeds the efficiency data points in Tables 1 and 2 of §63.745 and is approved by the permitting authority. (§63.745(g)(2)(i)(C))

3. If the pressure drop across the dry particulate filter system, as recorded pursuant to §63.752(d)(1), is outside the limit(s) specified by the filter manufacture or in locally prepared operating procedures, shut down the operation immediately and take corrective action. If the booth manufacture's or locally prepared maintenance procedures for the filter have not been performed as scheduled, shut down the operation immediately and take corrective action. The operation shall not be resumed until the pressure drop or water flow rate is returned within specified limits(s). (§63.745(g)(3))

The acceptable pressure drop range for the operating system is from 1.0" to 1.5" of water column for EU0060.
The acceptable pressure drop range for the operating system is from 0.9" to 1.4" of water column for EU0070.
The acceptable pressure drop range for the operating system is from 0.8" to 1.0" of water column for EU0080.
The acceptable pressure drop range for the operating system is from 0.8" to 1.0" of water column for EU0090.
The acceptable pressure drop range for the operating system is from 0.8" to 1.0" of water column for EU0100.
The acceptable pressure drop range for the operating system is from 0.9" to 1.3" of water column for EU0110.

- Except as provided in paragraphs (a)(4) through (a)(10) of §63.743(a) and in Table 1 of 40 CFR Part 63, Subpart GG, the permittee is also subject to the following sections of subpart A of this part: (§63.743(a))

1. § 63.4, Prohibited activities and circumvention; (§63.743(a)(1))
2. § 63.5, Construction and reconstruction; and (§63.743(a)(2))
3. § 63.6, Compliance with standards and maintenance requirements. (§63.743(a)(3))
4. For the purposes of this subpart, all affected sources shall submit any request for an extension of compliance not later than 120 days before the affected source's compliance date. The extension request should be requested for the shortest time necessary to attain compliance, but in no case shall exceed 1 year. (§63.743(a)(4))
5. (i) For the purposes of this subpart, the Administrator (or the State with an approved permit program) will notify the owner or operator in writing of his/her intention to deny approval of a request for an extension of compliance submitted under either § 63.6(i)(4) or § 63.6(i)(5) within 60 calendar days after receipt of sufficient information to evaluate the request. (§63.743(a)(5)(i))

   (ii) In addition, for purposes of this subpart, if the Administrator does not notify the owner or operator in writing of his/her intention to deny approval within 60 calendar days after receipt of sufficient information to evaluate a request for an extension of compliance, then the request shall be considered approved. (§63.743(a)(5)(ii))
6. (i) For the purposes of this subpart, the Administrator (or the State) will notify the owner or operator in writing of the status of his/her application submitted under § 63.6(i)(4)(ii) (that is,

whether the application contains sufficient information to make a determination) within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted, rather than 15 calendar days as provided for in § 63.6(i)(13)(i). (§63.743(a)(6)(i))

(ii) In addition, for the purposes of this subpart, if the Administrator does not notify the owner or operator in writing of the status of his/her application within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted, then the information in the application or the supplementary information is to be considered sufficient upon which to make a determination. (§63.743(a)(6)(ii))

7. For the purposes of this subpart, each owner or operator who has submitted an extension request application under § 63.6(i)(5) is to be provided 30 calendar days to present additional information or arguments to the Administrator after he/she is notified that the application is not complete, rather than 15 calendar days as provided for in § 63.6(i)(13)(ii). (§63.743(a)(7))
8. For the purposes of this subpart, each owner or operator is to be provided 30 calendar days to present additional information to the Administrator after he/she is notified of the intended denial of a compliance extension request submitted under either § 63.6(i)(4) or § 63.6(i)(5), rather than 15 calendar days as provided for in § 63.6(1)(12)(iii)(B) and § 63.6(i)(13)(iii)(B). (§63.743(a)(8))
9. For the purposes of this subpart, a final determination to deny any request for an extension submitted under either § 63.6(i)(4) or § 63.6(i)(5) will be made within 60 calendar days after presentation of additional information or argument (if the application is complete), or within 60 calendar days after the final date specified for the presentation if no presentation is made, rather than 30 calendar days as provided for in § 63.6(i)(12)(iv) and § 63.6(i)(13)(iv). (§63.743(a)(9))
10. For the purposes of compliance with the requirements of § 63.5(b)(4) of the General Provisions and this subpart, owners or operators of existing primer or topcoat application operations and depainting operations who construct or reconstruct a spray booth or hangar that does not have the potential to emit 10 tons/yr or more of an individual inorganic HAP or 25 tons/yr or more of all inorganic HAP combined shall only be required to notify the Administrator of such construction or reconstruction on an annual basis. Notification shall be submitted on or before March 1 of each year, and shall include the information required in § 63.5(b)(4) for each such spray booth or hangar constructed or reconstructed during the prior calendar year, except that such information shall be limited to inorganic HAP's. No advance notification or written approval from the Administrator pursuant to § 63.5(b)(3) shall be required for the construction or reconstruction of such a spray booth or hangar unless the booth or hangar has the potential to emit 10 tons/yr or more of an individual inorganic HAP or 25 tons/yr or more of all inorganic HAP combined.(§63.743(a)(10))

Operational Limitation:

a. The permittee shall conduct the handling and transfer of primers and topcoats to or from containers, tanks, vats, vessels, and piping systems in such a manner that minimizes spills. (§63.745(b))
b. The permittee shall comply with the requirements specified in paragraphs (f)(1) and (f)(2) of §63.745. (§63.745(f))

1. All primers and topcoats (including self-priming topcoats) shall be applied using one or more

of the application techniques in paragraphs (f)(1)(i) through (f)(1)(ix) of §63.745(f). (§63.745(f)(1)

(i) Flow/curtain application; (§63.745(f)(1)(i))
(ii) Dip coat application; (§63.745(f)(1)(ii))
(iii) Roll coating; ((§63.745(f)(1)(iii))
(iv) Brush coating; ((§63.745(f)(1)(iv))
(v) Cotton-tipped swab application; ((§63.745(f)(1)(v))
(vi) Electrodeposition (dip) coating; ((§63.745(f)(1)(vi))
(vii) High volume low pressure (HVLP) spraying; ((§63.745(f)(1)(vii))
(viii) Electrostatic spray application; or ((§63.745(f)(1)(viii))
(ix) Other coating application methods that achieve emission reductions equivalent to HVLP or electrostatic spray application methods, as determined according to the requirements in §63.750(i). ((§63.745(f)(1)(ix))

2. All application devices used to apply primers or topcoats (including self-priming topcoats) shall be operated according to company procedures, local specified operating procedures, and/or the manufacturer's specifications, whichever is most stringent, at all times. Equipment modified by the facility shall maintain a transfer efficiency equivalent to HVLP and electrostatic spray application techniques. (§63.745(f)(2))

c. The emission limitation in Emission Limitation 1. a. through c. shall be achieved by:

4. The application of low solvent coating technology where each and every coating meets the specified applicable limitation expressed in pounds of VOC per gallon of coating, excluding water and exempt solvents, stated in subsection of Emission Limitation 1.a. through 1.c.;
5. The application of low solvent coating technology where the monthly volume-weighted average VOC content of each specified coating type meets the specified applicable limitation expressed in pounds of VOC per gallon of coating , excluding water and exempt solvents, stated in Emission Limitation 1.a. through 1.c.; averaging is not allowed for specialty coatings, and averaging is not allowed between primers, topcoats (including self-priming topcoats), Type I milling maskants, and Type II milling maskants or any combination of the above coating categories; or
6. Control equipment, including but not limited to incineration, carbon absorption and condensation, with a capture system approved by the director, provided that the permittee demonstrates, in accordance with the *Testing* section, that the control system has a VOC reduction efficiency of eighty-one (81%) or greater.

Testing:

If the permittee elects to demonstrate compliance with 10 CSR 10-5.295 by use of control equipment meeting the requirements of Operational Limitation c. 3., shall demonstrate the required capture efficiency in accordance with EPA Methods 18, 25, and/or 25A in 40 CFR 60, Appendix A.

Monitoring:

If a dry particulate filter system is used, the following requirements shall be met:

- Maintain the system in good working order (§63.745(g)(2)(iv)(A))
- Install a differential pressure gauge across the filter banks (§63.745(g)(2)(iv)(B))
- Continuously monitor the pressure drop across the filter and read and record the pressure drop once per shift (§63.745(g)(2)(iv)(C))

- Take corrective action when the pressure drop exceeds or fall below the filter manufacturer's recommended limit(s). (§63.745(g)(2)(iv)(D))
- If the pressure drop across the dry particulate filter system , as recorded pursuant to §63.752(d)(1), is outside the limit(s) specified by the filter manufacture or in locally prepared operating procedures, shut down the operation immediately and take corrective action. (§63.745(g)(3))
- Dry particulate filters used to comply with §63.745(g)(2) or §63.746(b)(4) must be certified by the filter manufacturer or distributor, paint/depainting booth supplier, and/or the facility owner or operator using method 319 in appendix A of subpart A of Part 63, to meet or exceed the efficiency data points found in Tables 1 and 2 of §63.745 for existing sources. (§63.750(o))
- The permittee who uses a dry particulate filter system to meet the requirements of §63.745(g)(2) shall, while primer or topcoat applications are occurring, continuously monitor the pressure drop across the system and read and record the pressure drop once per shift following recordkeeping requirements of §63.752(d) (Record Keeping requirements for Inorganic HAP Control). (§63.751(c)(1))

Record Keeping:

- Primers and Topcoats – The permittee shall record the following information: (§63.752(c))
  1. The permittee shall fulfill all recordkeeping requiremetns specified in §63.10 (a), (b), (d), and (f). (§63.752(a))
  2. The name and VOC content as received and as applied of each primer and topcoat used at the facility. (§63.752(c)(1))
  3. Each owner or operator of an aerospace manufacture and/or rework operation that applies coatings listed in Emission Limitation 1.a. through 1.c of this permit condition shall-
     a. Maintain a current list of coatings in use with category and VOC content as applied;
     b. Record each coating volume usage on a monthly basis; and
     c. Maintain records of monthly volume-weighted average VOC content for each coating type included in averaging for coating operations that achieve compliance through coating averaging under Operational Limitation c.2. of this permit condition.
  4. For "low HAP content" uncontrolled primers with organic HAP content less than or equal to 250 g/l (2.1 lb/gal) less water as applied and VOC content less than or equal to 250 g/l (2.1 lb/gal) less water and exempt solvents as applied:(63.752 (c)(3))
     a. Annual purchase records of the total volume of each primer purchased (§63.752(c)(3)(i)
     b. All data, calculations, and test results (including EPA Method 24 results) used in determining the organic HAP and VOC content as applied. These records shall consist of the manufacturer's certification when the primer is applied as received, or the data and calculations used to determine H_i if not applied as received. (§63.752(c)(3)(ii))
  5. For primers and topcoats complying with the organic HAP or VOC content level by averaging: (§63.752(c)(4))
     a. The monthly volume-weighted average masses of organic HAP emitted per unit volume of coating as applied (less water) (H_a) and of VOC emitted per unit volume of coating as applied (less water and exempt solvents) (G_a) for all coatings (as determined by the procedures specified in §63.750(d) and (f)) (§63.752(c)(4)(i))
     b. All data, calculations and test results (including EPA Method 24 results) used the

determine the values H_a and G_a. (§63.752(c)(4)(ii))

- Inorganic HAP Control.
  1. For control of emissions complying with §63.745(g) through the use of a dry particulate filter system or a HEPA filter system, record the pressure drop across the operating system once each shift during which coating operations occur. (§63.752(d)(1))
  2. This log shall include the acceptable limit(s) of pressure drop, water flow rate, or for the pumpless waterwash booth, the booth manufacturer recommended parameter(s) that indicate the booth performance, as applicable, as specified by the filter or booth manufacturer or in locally prepared operating procedures. (§63.752(d)(3))

Use Attachment J, Attachment K, Attachment L (or equivalent forms created by the installation) for the purposes of the Record Keeping requirements of this regulation.

Reporting:

- The permittee shall submit semiannual reports occurring every six (6) months from the date of the notification of compliance status that identify: (§63.753(c)(1))
  1. Where compliance is not being achieved through the use of averaging or control device, each value of Hi and Gi, a recorded under §63.752(c)(2)(i), that exceeds the applicable organic HAP or VOC content limit specified in §63.745(c). (§63.753(c)(1)(i))
  2. Where compliance is achieved through the use of averaging, each value of Ha and Ga, as recorded under §63.752(c)(4)(i), the exceeds the applicable organic HAP or VOC content limit specified in §63.745(c). (§63.753(c)(1)(ii))
  3. All times when a primer or topcoat application was not immediately shut down when the pressure drop across a dry particulate filter or HEPA filter system was outside the (§63.753(c)(1)(i))limit(s) specified by the filter or booth manufacturer or in locally prepared operating procedures. (§63.753(c)(1)(vi))
  4. If the operations have been in compliance for the semiannual period, (provide) a statement that the operations have been in compliance with the applicable standards. (§63.753(c)(1)(vii))
  5. The permittee shall submit annual reports beginning 12 months after the date of the notification of compliance status listing the number of times the pressure drop was outside the limit(s) as specified by the filter or booth manufacturer or in locally prepared operating procedures. (§63.753(c)(2))
- The permittee shall report to the Air Pollution Control Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.

Attachment B

Permit Condition EU0140-001

10 CSR 10-5.295
Control of Emissions from Aerospace Manufacturing and Rework Facilities

Emission Limitation:

1. The permittee shall not cause, permit, or allow the emissions of volatile organic compounds (VOC) from the coating of aerospace vehicles or components to exceed:

a. 2.9 pounds per gallon (350 grams per liter) of coating, excluding water and exempt solvents, delivered to a coating applicator that applies primers. For general aviation rework facilities, the VOC limitation shall be 4.5 pounds per gallon of coating, excluding water and exempt solvents, delivered to a coating applicator that applies to primers;

b. 3.5 pounds per gallon (420 grams per liter) of coating, excluding water and exempt solvents, delivered to a coating applicator that applies topcoats (including self-priming topcoats). For general aviation rework facilities, the VOC limit shall be 4.5 pounds per gallon (540 grams per liter) of coating, excluding water and exempt solvents, delivered to a coating applicator that applies topcoats (including self-priming topcoats);

c. The VOC content limits listed in Table 1, of 10 CSR 10-5.295, expressed in pounds per gallon of coating, excluding water and exempt solvent, delivered to a coating applicator that applies specialty coatings;

Operational Limitation:

1. The permittee shall apply all non-exempt primers and topcoats using one (1) or more of the application techniques specified below:
    1. Flow/curtain application;
    2. Dip coat application;
    3. Roll coating;
    4. Brush coating;
    5. Cotton-tipped swab application;
    6. Electrodeposition (dip) coating;
    7. High volume low pressure (HVLP) spraying;
    8. Electrostatic spray application; or
    9. Other coating application methods that achieve emission reduction equivalent to HVLP or electrostatic spray application methods, as determined by the director.
2. The emission limitations in Emission Limitation 1. a. through c.. shall be achieved by:

a. The application of low solvent coating technology where each and every coating meets the specified applicable limitation expressed in pounds of VOC per gallon of coating, excluding water and exempt solvents, stated in subsection of Emission Limitation 1.a. through 1.c.;

b. The application of low solvent coating technology where the monthly volume-weighted average VOC content of each specified coating type meets the specified applicable limitation expressed in pounds of VOC per gallon of coating , excluding water and exempt solvents, stated in subsection (3)(A) of 10 CSR 10-5.295; averaging is not allowed for specialty coatings, and averaging is not allowed between primers, topcoats (including self-priming topcoats), Type I milling maskants, and Type II milling maskants or any combination of the above coating categories; or

c. Control equipment, including but not limited to incineration, carbon absorption and condensation, with a capture system approved by the director, provided that the owner or

operator demonstrates, in accordance with the *Testing* section, that the control system has a VOC reduction efficiency of eighty-one (81%) or greater.

3. The permittee shall ensure that all application devices used to apply primers and topcoats (including self-priming topcoats) are operated according to company procedures, local specified operating procedures, and/or the manufacturer's specifications, whichever is most stringent, at all times. Equipment modified by the owner or operator shall maintain a transfer efficiency equivalent to HVLP or electrostatic spray application techniques.

Testing:

If the permittee elects to demonstrate compliance with 10 CSR 10-5.295 by use of control equipment meeting the requirements of Operational Limitation c. 3., shall demonstrate the required capture efficiency in accordance with EPA Methods 18, 25, and/or 25A in 40 CFR 60, Appendix A.

Monitoring/Record Keeping:

- The permittee that applies coatings listed in 10 CSR 10-5.295(3)(A) shall-
  1. Maintain a current list of coating in use with category and VOC content as applied;
  2. Record each coating volume usage on a monthly basis; and
  3. Maintain records of monthly volume-weighted average VOC content for each coating type included in averaging for coating operations that achieve compliance through coating averaging under 10 CSR 10-5.295(3)(B)2. .
- All records must be kept on-site for a period of five (5) years and made available to the department upon request.

Reporting:

The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after any exceedance of any of the terms imposed by this regulation, or any malfunction which could possibly cause an exceedance of this regulation.

[1] 40 CFR 63.741(e) exempts from all Aerospace NESHAP regulation all hazardous wastes subject to the requirements of 40 CFR 262 through 268. Boeing handles all solvent cleaning production waste generated at its facility as hazardous waste. Thus, a very large proportion of Boeing's housekeeping activities are technically not even subject to the Aerospace NESHAP.

[2] One Aerospace NESHAP housekeeping measure states that non-hazardous waste solvent-laden absorbent applicators should be placed in bags or other closed containers "upon completing their use." *See* 40 CFR 63.744(1). As discussed below in Boeing's response to EPA's St. Louis Item 3 and St. Charles Item 4, Boeing has accepted a permit condition that requires these materials to be placed in bags or containers "before leaving the work area." Because leaving the work area (for example to go to the restroom) does not indicate that the use of the materials has been completed, this permit condition is more stringent than required, but was a reasonable part of the balanced programmatic approach agreed to by Boeing and the permitting authorities.

[3] The programmatic (as opposed to instance-by-instance) approach to compliance with housekeeping measures is also supported by the reporting provisions of 40 CFR 63.753(b). While that section specifically requires that "any instance" of noncompliance with several specified requirements of the cleaning operations standard be reported, the housekeeping measures are not subject to such reporting. See also EPA's Sample Aerospace NESHAP Compliance Status Notification Report (Dec. 20, 2001) (form available for use by sources, at their option, to comply with 40 CFR 63.753(b)-(e) does not requiring any reporting or certification with regard to housekeeping measures.)

[4] In this regard, Boeing notes that the cleaning operation standards include specific monitoring requirements (other than periodic audits of housekeeping measures) and that in its CAM rulemaking and the Periodic Monitoring Guidance (which was vacated by the D.C. Circuit), EPA previously and consistently explained that post-1990 regulations such as the Aerospace NESHAP are presumed to have adequate monitoring provisions.

[19]Prompt reporting requirement applicable to sources under the federal operating permit program.